THE BUILDER

A Journal for the Architect & Constructor

JANUARY 18, 1929 — No. 4485

LEADING CONTENTS

ARTICLES	PAGES
Leader: The Future of Architecture ...	147
Notes ...	148 & 149
General News ...	150
Competition News ...	150
Correspondence ...	151
Meetings ...	151
R.I.B.A. Meeting: Development of South London ...	152
"The Builder" Debate: XIV. Small Houses, Detached or Semi-detached	153
The Architectural Association: Liverpool Cathedral ...	153
Notes on Illustrations ...	154 & 170
J. L. Pearson and Truro Cathedral: II. By S. E. Dykes Bower ...	168-170
English Commercial Buildings: II. By F. E. Bennett, A.R.I.B.A. ...	171
Societies and Institutions ...	172
Town Planning Institute: Town-Planning Clauses and Schemes ...	173
Competition in Contracting: II. By W. T. Creswell ...	174
Architects' and Builders' Inquiry Bureau	174
Building Industry Council ...	175
Improvement Schemes under the Housing Act ...	175
New Cinemas ...	175
New Buildings in London ...	176
Rates of Wages in the Building Trade...	177
Contracts, Competitions, etc. ...	178 & 179
Proposed New Buildings and Other Works ...	180
Prices Current of Materials ...	181
New Buildings in Scotland ...	182
Current Prices for Building Work in London ...	183
Patents ...	184
Tenders ...	184-186

ILLUSTRATIONS

PLATES:

The William Booth Memorial Buildings, Denmark Hill, S.E. Messrs. Gordon & Viner and Sir Giles Gilbert Scott, Associated Architects.

	PAGE
Two Houses at Hampstead. Mr. W. Sydie Dakers, Architect ...	155 & 156
R.I.B.A. (Alfred Bossom) Travelling Studentship. Winning Design, by Mr. Frank Scarlett, A.R.I.B.A. ...	157
Carr Crofts Baths and Washhouse Competition, Leeds:	
First Premiated Design. Messrs. J. C. Prestwich & Sons, Architects ...	158 & 159
Second Premiated Design. By Messrs. H. Guy Holt and Hubert A. Thomas ...	160 & 161
Competition for Lay-out of the Old Harbour Station Site, Ramsgate: First Premiated Design. Messrs. A. Minoprio & Hugh C. C. Spenceley, Architects ...	162
Meon Road Elementary School, Portsmouth. Messrs. A. E. Cogswell & Sons, Architects ...	150, 163-167

St. Peter's Hospital, Bristol. From a Drawing by Mr. C. H. Buckle ...	146
The "Lido" Cinema, Golders Green, N.W.: Treatment of Auditorium Wall. Mr. Guy Lipscombe, Artist; Mr. W. J. King, Architect ...	148 & 149
Views of Truro Cathedral: Interior.	168, 169 & 176

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87TH YEAR

St. Peter's Hospital, Bristol.

From a drawing by Mr. C. H. Buckle.

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VOL. CXXXVI. No. 4485. JANUARY 18, 1929.

THE FUTURE OF ARCHITECTURE

THE practice of architecture has always formed a link between art and science, for, in architecture, the one has merged into the other; and the position makes the part which the architect has to play a peculiarly difficult one, not shared by any other of his brother artists. Science is exact knowledge arrived at out of human experience and experiment, and ultimately above argument when the truth has been attained. Art is an aspiration towards the truth, and the gift of a wise Providence who has blessed us with a little knowledge, infinitesimal compared with the vast scheme of the universe. Science knows a little for a fact, and is indeed wonderful in that little; but art spreads further, and the inspiration of a great artist approaches at times the greatness of the universe and the wonder of the infinite.

It is the difficult task of the architect to add much feeling to a little exact knowledge, and, out of the effort, to achieve fine building; and he has to be artist and scientist to do so successfully. He must feel the way to express his problem, and know the way to achieve it. After a "dark age," during which the public has left the architect severely alone, except when he interfered with their way of living or demanded an entry into the public purse, there is a distinct awakening of interest in his part in the scheme of society. The feeling that an architecture based only on exact sciences is lacking in some essential factor is more generally shared now than within the memory of man. The knowledge that building based only on the plans of a dreamer can hardly materialise is even more fully understood. In such an atmosphere of increasingly intelligent interest, architecture must have a great future before it. That future will arrive all the more quickly as architects take the trouble to clear the air of those misconceptions of their function which obscure public opinion.

It is easy to follow the mental process that analyses architecture as so much art and so much science, and goes on to assume that the process of building must be shared between the artist and the scientist—the architect and the engineer—as equal partners. It is, however, a false line of thought, because it assumes first that there is a firm line of demarcation between the science and art of building, and, secondly, that these are equal component parts of the process.

A letter written to the "Observer" by Mr. Tattershall Dodd, to which we referred in a recent number, suggests that the writer has followed this line of thought to its logical conclusion; which is that the architect has become no more than a provider of "the costume and the ornament"—or, in other words, the tailor instead of the creator. Mr. Dodd has in fact diagnosed the disease from which our worst buildings suffer, but we feel he has led himself astray in assuming that this state of affairs is typical of modern architecture. It is not quite fair to set a standard from the worst, and we will go so far as to say that in judging the art of an age it is only fair to take the best, as the nearest approach to a goal. It is true that this age is producing a number of bad buildings, and it may be it is producing a larger proportion of bad buildings than was the case in the eighteenth century of this country's architectural history. But it is equally true that we are producing a very much smaller proportion of bad buildings than was the case in its nineteenth century, and this step forward is, we hope, the beginnings of progress.

In judging the stage at which architectural development has arrived at the present day, we should consider the works of the masters of the art, rather than the uninspired scene-painting of those who have been content to leave the creative element to others. If the design of a steel-framed building is considered, it may appear that the early appearance of the blue prints from an engineer's office, defining the exact sizes and disposition of all the steel members, implies that science has acted independently of the artist. Such an inference arises out of a lack of mental proportion. Every architect worthy of the name to-day knows perfectly well how steel construction must be handled, and the knowledge must be there before he can dispose the building into the plans upon which the engineer has to work. Beyond this the calculations necessary to arrive at the sizes of members required is no more than the hard work of an intelligent brain. The average engineer would laugh at the idea that such a task as this was a marvellous achievement; and to impose it upon the architect is neither necessary nor desirable, for already the complications of civilised life make his work almost more than one individual can compass. We do not intend to imply that engineering presents no fields to conquer. Where the task demands exact science as the ruling factor, the engineer will remain pre-eminent, and in meeting some of these problems the engineer will need something of the imagination and vision of the artist to pre-conceive the structure. But in the everyday structural problem it is the architect who must lead throughout, though he may accept with gratitude the helpful industry and skill of the engineer and specialist. Without this order there can be no fine architecture.

There is one other point in the letter referred to which calls for comment. The writer of it says that "the trabeated construction of the Greeks is no longer required, nor is the Roman arch or the Gothic vault," and he goes on to call for an enlightened common training for architects and engineers upon "*new* principles." There is the suggestion in these expressions of that disturbing element that is confusing the true modernist development, and we believe that it arises out of a failure to understand structure. The Greek temple was an essay in the post and lintel. Roman buildings were exercises in the post, the lintel and the arch. Gothic building had only the post and lintel and arch to choose from. And steel construction is a use of the post and lintel in a fresh material, yet governed by the same rules of stability and structure that have ruled all building from the beginning. Those who imagine that the new ways we have learnt to build have altered the rules of building would be surprised to know how little different from past history was the manner of building Liverpool Cathedral. Yet this has been our greatest building effort of the century, expressing the highest aspirations which this age has been capable of feeling.

All those who feel that things are not as they should be in the world of architecture may take comfort in the thought that there has been a wonderful raising of standard, which is still being maintained; and that this is the product of a scheme of training that improves every year. At this outset of a New Year we shall do well to hold fast to this fact and help to maintain it.

NOTES

Architects and Engineers.

SOME pertinent remarks by Mr. H. S. Goodhart-Rendel on the relations of architects and engineers appeared this week in the *Times*. He thinks that unless the qualifications and work of architects and engineers are fused one cannot hope for works such as those of Sanmichele, of Wren, of Paine, of Alexander. He rightly claims that each profession would do better work if they understood more of each other's job. He rightly points out that the engineer is far more at fault in adding ornament to his work than is the architect, and instances Holborn, Blackfriars Bridge, the bridge by Chelsea Barracks, and Hammersmith Bridge. The usual function of the professional "architectural assistant" to the engineer is that of adding insult to injury, he thinks. Engineers will probably not very willingly call in architects to their aid in the design and construction of bridges, but it is the authority which commissions these works that is at fault in not seeing the importance of the collaboration. It appears to us that a striking object lesson in this matter is the fact that the architectural profession has not been called in for the consideration of the Charing Cross bridge scheme, and all that it involves in the matter of architectural effect. The same mistaken method is again repeated and a great scheme, which involves most critical town-planning design as well as the effect of great new masses of construction, has been placed before the public without any reference to the architectural profession. We always understood that Mr. Baldwin had promised proper architectural consideration, and yet all that seems to be left is a possibility that architects may be asked to provide trimmings to what appears to be an essentially bad design from a town-planning point of view. The design accepted by the County Council has been unsparingly condemned. What has the Institute to say about this?

The Channel Tunnel.

THE Channel tunnel is being seriously discussed again, and Professor Richardson's claim for a roadway under the Channel suggests many great and undeniable advantages. It is hardly realised what would be the enormous advantages to, and pleasure of, this country if a train and road tunnel were constructed. Instead of being an element of danger to this country, it would probably be a safeguarding link of friendship between two great countries which would remove further than ever the menace of war. We are not, of course, indifferent to the arguments to be advanced against it.

Legal Burdens.

A CORRESPONDENT writes to say that having recently purchased a house he has received his account for solicitors' charges amounting to just under 4 per cent. of the purchase price. (Incidentally, he does not make any invidious comparisons concerning the amount and value of architects' charges which are popularly supposed to be a fearful burden upon the community.) "It seems to me," he says, "considering there were no complications of any kind, that these legal charges for buying and selling houses are, to put it bluntly, absurd. They constitute a grievance to many people and they hinder the free development and exchange of house property. How much simpler is it to buy a motor car, and how much more tempting."

Real Property.

THE grievance against the legal costs of buying and selling real property is an old one, and though the remedy is not quite so simple as it looks, it is a matter which is long overdue for revision. To recollect the maxim, "Love your neighbour, but don't pull down the fence," is to realise the complications that might develop if houses could be transferred like share certificates. Nevertheless, there are many standing charges and duties upon the buying and selling of house property which are a burden upon society, and to that extent they operate in the scale against the desire for ownership.

A Great Opportunity.

IT has always been our belief that a great opportunity awaits any government that is prepared to try to reduce the housing shortage by making house ownership something less of a penalty. It must be remembered that we have reached the day when the provision of a house is not really our affair; it takes its place in these days with other and more desirable things, and the truth is it fails to attract. The subsidy system carries with it the penalty for breaking economic laws, while at the other end the whole system of stamp duties, land values, rating, and income tax remains as an incubus. It might be argued from the purely economic standpoint that if the State has to pay, the source of the payment is immaterial, and that the subsidy is a method of encouraging the building of houses as apart from the burdens after they are built. This is precisely where a fundamental error is

From the "Cinemas" Issue of *Architecture*.

The "Lido" Cinema, Golders Green, N.W.: Treatment of Auditorium Wall.

MR. GUY LIPSCOMBE, Artist; MR. W. J. KING, Architect.

From the "Cinemas" Issue of *Architecture*.

The "Lido" Cinema, Golders Green, N.W.: Treatment of Auditorium Wall.

MR. GUY LIPSCOMBE, Artist; MR. W. J. KING, Architect.

being made. The desire to build a house is implied in the desire for house ownership, and it is this latter desire which should be stimulated by every means possible.

Improving Trade. THE statistics of imports and exports issued by the Board of Trade for the year that has passed, are a welcome indication that trade is recovering. It is true that the improvement is relatively small, but it is significant if we can regard it as the direct result of business methods and relationships that depression has forced upon the community. The prospect is brighter if we are seeing the first fruits of improved output, more efficient organisation and greater enterprise.

The Mansion House. THE future of the Mansion House is a subject which must cause some concern in the City. That it needs very considerable improvement is unquestionable. Besides this, the great depth to which excavations are taking place gives rise to some anxiety as regards foundations. When great holes are being made in the ground some 60 or even 80 feet below the surface, we can hardly feel complete security as to the condition of surrounding sites.

Wells Cathedral. OWING to the danger to the Cathedral and surrounding buildings from the vibration of traffic, the Dean and Chapter of Wells, we are informed, are considering the advisability of applying to the Ministry of Transport for an order to close the Cathedral Green Road to heavy traffic. The position is outlined by Sir Charles Nicholson in a report to the Dean of Wells, in which he says that although the Cathedral Church itself is set back from the street, the Close Gates, Chain Bridge, Vicar's Hall, and to a less extent the Chapter House, the Deanery, and the residence of the Principal of the College, are buildings which are integral features of the Cathedral considered as an architectural and historic monument and are affected by the vibrations of heavy traffic. The report concludes with an expression of opinion that the time has come when it is necessary to make some stringent regulations as regards both the volume and the speed of traffic through the Close if the buildings are to be preserved in their integrity.

Interest Charges in Business. A CORRESPONDENT writes: "Most builders have had bitter experience of the high charges they have had to pay at times for the capital needed to finance their business. Accordingly they will be interested in legislation to curb exorbitant financing charges in connection with building that has been recommended to the legislature of Massachusetts by a Special Commission set up on the Necessaries of Life. The report states that the charges made on loans are far too high, and they ask for some control to be exercised over mortgage lenders, 'many of whom apparently recognise no limit in their exactions of interest charges and bonuses.'"

Homes and Houses. THERE is about democracy a very simple paradox demonstrated by Mr. Ramsay MacDonald in one of his recent discourses upon architecture. We have not solved the housing problem, he considered, until we get shelters which combine the spiritual and physical functions. "We think far too much about wages and income, and too little about laziness." This might mean an exhortation to mankind—in the building trade in particular—to be industrious, whereas Mr. MacDonald was merely expressing the philosophy of the essayists that people were doing so much to-day that this tended to cease to be anything.

The Paradox. So far as architecture is concerned the unfortunate paradox seems to us to be obvious. Incidentally the essayist would no doubt make a nice distinction between leisure and laziness, but if we were to say that democracy is thinking too much about wages and too little about laziness we think we have explained the paradox. The high cost of building explains why so many are homeless, and why so many are glad of a shelter, even if they have forgotten the spiritual qualities of a home. That is their misfortune, not their blame.

Emotional Architecture. WE are not concerned with the political movements of democracy, but we are interested in the emotional flavour of its politics where architecture is involved. Where a number of doctrines are so easily combined, we must remain at the mercy of words, unable to understand at one moment the emotional flavour and the next moment the curious rigidity of the intellectual outlook. Architecture has suffered a great deal from those who no doubt mean well, but fail to grasp the practical considerations and implications.

GENERAL NEWS

Dr. Raymond Unwin's Successor.

The Minister of Health has appointed Mr. A. Scott, M.B.E., A.R.I.B.A., to succeed Dr. Raymond Unwin, F.R.I.B.A., on his retirement from the public service.

Etchers and Engravers.

Miss E. Gibbs and Messrs. Harry Morley and C. F. Tunnicliffe have been elected Associates of the Royal Society of Painter Etchers and Engravers.

Alfred C. Conrade Exhibition.

By the kindness of the Royal Institute of British Architects an exhibition of the works (paintings and drawings) of Alfred C. Conrade will be held in the Galleries of the Institute, 9, Conduit-street, from February 5 to 16 inclusive.

Proposed Swimming Baths, Woking.

Woking Urban District Council has decided to erect, at a cost of £22,000, a swimming bath, which may be alternatively used as a public hall. The proposed site is in Chobham-road. Messrs. A. W. S. & K. M. B. Cross are the architects.

Mr. William Lee Roberts's Estate.

Mr. William Lee Henry Roberts, J.P. (57), of Holborough, Snodland, Rochester, Kent, late of the 1st Royal Dragoons, founder of the Holborough Cement Works and chairman of the Holborough Cement Co., a former High-Sheriff of Kent (net personalty £133,716), left £249,506.

Architects' Estates.

Mr. Laurence Hobson, F.R.I.B.A., of Ashburton Cottage, Abbey-road, West Kirby, Cheshire, and of Harrington-street, Liverpool, architect (net personalty £17,192), left £19,009.

Mr. Thomas Edward Liggins, of Richmond-street, Bridlington, architect (net personalty £10,653), left £11,425.

Proposed Exhibition Hall, Manchester.

It is expected that shortly plans will be completed for the erection in Manchester of a new combined exhibition hall, hotel, sporting club, and garage, on a central site. The cost of the scheme is estimated at something in the neighbourhood of a million sterling. Messrs. Charles Swain and Partners, of King-street, Manchester, have been appointed architects for the buildings.

Horsenden Hill.

Harrow Council at its next meeting will consider a proposal to co-operate with the Wembley and Ealing Councils in a scheme to purchase Horsenden Hill, an ancient British stronghold, still bearing traces of earthworks on its crest, and a well-known landmark between Ealing and Harrow. The hill is said to derive its name from Horsadun—the hill fort flying the standard of the white mare. There is a tradition that Horsa lies buried on the hill, and that from his daughter Ealine the name of Ealing is derived.

COMPETITION NEWS

Old Harbour Station Site Competition, Ramsgate.

The awards in this competition are given on page 154, together with a description of the first premiated design.

Carr Crofts Baths and Washhouse, Leeds.

The assessor in this competition, Mr. Henry Price, A.R.I.B.A., has made his award as follows :—

First (premium £300) : Messrs. J. C. Prestwich & Sons, Leigh.

Second (premium £200) : Mr. H. Guy Holt and Mr. Hubert A. Thomas, London and Liverpool.

Third (premium £100) : Messrs. Horth & Andrew, Hull.

The work of erection of the baths and wash-house will be carried out under the direction of the authors of the first premiated design in accordance with the conditions of the competition.

Arrangements have been made for the premiated designs to be exhibited in the art gallery for one week, commencing Wednesday last, January 16.

Super-Cinema, Paignton, S. Devon.

It is proposed to erect a super-cinema—see "New Cinemas," on page 175, for further details—at Paignton, in connection with which a competition for designs may be held. The cinema, it is understood, will be of the "atmospheric" type—an example of which is given in the current "Cinemas" issue of *Architecture*.

Proposed New Hospital, West London.

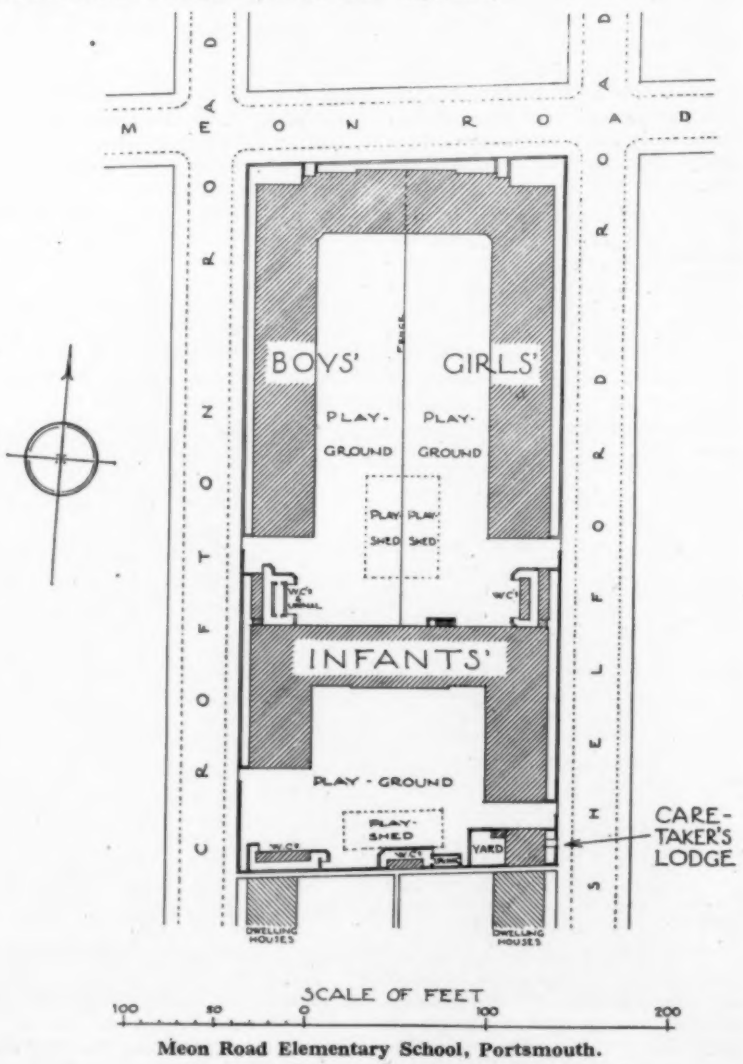
A large property in Ravenscourt Park, W., known as Parkside, has been acquired by the trustees of the Freemasons' Hospital, of Fulham-road, S.W.3, who are to utilise it as the site for their proposed new hospital. A limited competition for the plans may be held shortly. About 130 beds will be provided in the first section.

Almshouses Competition, South Molton.

We have received the following notice from the R.I.B.A. :—The Competitions Committee desire to call the attention of members to the fact that the conditions of the above competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime, members should not take part in the competition.

R.I.B.A. Competition for a Design for an Aerodrome.

The designs submitted by the competitors in the final competition for the R.I.B.A. competition for a design for an aerodrome will be on exhibition in the R.I.B.A. Galleries, 9, Conduit-street, W.1, from January 26 to February 2, inclusive, between the hours of 10 a.m. and 8 p.m. (Saturday 10 a.m. and 5 p.m.). The two prizes, the first of £125, and the second of £25, have been presented to the Council of the R.I.B.A. by the Directors of the Gloster Aircraft Company, Ltd., and Messrs. H. H. Martyn & Co., Ltd. The schemes will deal with a London Aircraft Terminus suitable to the supposed requirements of air traffic 15 years hence. The jury to award the prizes consists of Sir Sefton Brancker, K.C.S., Mr. C. Cowles-Voysey, Mr. E. Vincent Harris, Sir Edwin Lutyens, R.A., Major R. Mayo (Consulting Engineer, Imperial Airways, Ltd.), Mr. T. S. Tait, Mr. Maurice E. Webb, Mr. G. E. Woods-Humphrey (General Manager, Imperial Airways, Ltd.).



Meon Road Elementary School, Portsmouth.

MESSRS. A. E. COGSWELL & SONS, Architects.

(*See pages* 163-167.)

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

R.I.B.A. Development Scheme.

SIR,—The position of the R.I.B.A. has deteriorated so much during the last few years by the admission of thousands of men without any test or examination that a few more thousands could make little difference. I was present at a meeting of an important local authority a few months ago, and the question arose as to the salary of an architectural assistant. A member who was pleading for him stated: "He is a Member of the Royal Institute of British Architects," a remark which was greeted with interruptions from several men, who called out, "That doesn't mean anything in these days"! I must say I was surprised that the lowering of the status of the Institute was so widely recognised.

It seems to me ridiculous to suppose that membership of the Institute will mean anything of importance if these new proposals are agreed to. I have in my office a junior assistant who, I believe, has never made the plans for a building in his life; yet that man could start practice to-morrow and fix a brass plate on his door, "Mr. ——, Chartered Architect, and Member of the Royal Institute of British Architects."

It seems almost impossible to lower the status of the Institute more than has been done; yet our Council evidently mean to try to do so.

ANOTHER FELLOW.

SIR,—I am sorry to learn from Mr. Adams's letter, published in last week's issue of *The Builder*, that his reason for contesting the Parliamentary Registration of Architects was because more individuals would rank as qualified architects without going through the proper ordeal of examination.

I pointed out, in an issue of *The Builder* of last year, that there are not 50 per cent. of the members of the R.I.B.A. qualified by their own Institute examinations. Many, if not most, of the official architects in this country are, according to Mr. Adams, unqualified. However, I should not like to think for one moment that the passing of the R.I.B.A. examinations is any evidence of a qualified architect, more especially as I have known their examiners not to have been in the A.R.I.B.A. class.

Most members of the architectural profession know how much importance to attach to the elected F. and L.R.I.B.A. class, but it is an injustice to the public (not to mention other architects who are really experienced) to hurl these classes on the public as "Chartered Architects." It is nothing more than misleading the public. All experienced architects have the right to be Chartered, that being the object for which the Charter was granted.

OXON.

District Surveyors' Examinations.

SIR,—In answer to the letters that have appeared in your paper, it has been the considered policy of the Royal Institute of British Architects not to publish the questions set at the Statutory Examinations for District Surveyors, as it was considered that this examination should be a test in knowledge of building gained by experience as architects in private practice, so that when candidates who pass the examinations are appointed as District Surveyors they may administer the Building Acts with an endeavour to meet those engaged in building in a helpful and sympathetic spirit, knowing the difficulties in applying the Building Acts to the various problems that have to be dealt with in building. This is essentially an examination that should not be crammed for.

The syllabus is:—

1. The materials must be in use in building; their strength under various stresses, their excellencies, defects, weight, decay, and other properties and the indications of their being of good or bad quality; the rough methods of noting them on the spot; the bonding of masonry and brickwork, use of mortar and cement, framing of carpentry, and the testing of trusses and timber guides.

2. The loads and stresses affecting structures and the modes of estimating them and calculating arches and the different parts of timber, reinforced concrete and steel structures; especially such rapid modes of calculating as can be employed on the spot readily.

3. Cast iron, wrought iron and steel. The design, testing and fixing of constructional iron and steelwork.

4. Foundations in various kinds of soil and precautions to be taken in digging them; expedients when the bottom is bad or under water; the risk of accident due to interference with foundations after they have been put in or to increasing the load on them; the foundations of high chimney shafts; indications of the failure of foundations.

5. Usual defects in construction and materials; decay of structures; neglected and dangerous structures; shoring, underpinning, repair of walls, tying buildings together.

6. The behaviour of various materials and modes of construction with reference to fire; fire-resisting construction; precautions necessary in heating and lighting buildings; precautions to be taken in the storage of water.

7. The London Building Act of 1894 and all amendments of 1898, 1905, 1908, 1909, and the by-laws in force; and the ordinary procedure thereunder including the mode of valuing a party wall.

8. Defects or deficiencies in plans for a proposed building.

H. D. SEARLES-WOOD,
Chairman Statutory Board of Examiners.

Private Enterprise and State Encroachment.

SIR,—We cannot but sympathise with the lay Press, whose legitimate province is about to be invaded by a State-fed B.B.C. As is but natural, their grievance is loudly and widely expressed.

Will it help them to appreciate and voice the similar unfairness which the architectural and civil engineering professions have long suffered, *i.e.*, the "scooping" of their proper duties by State and municipal officials, of whose work the real cost to the tax- and ratepayer is never ascertained? Adversity brings unexpected bedfellows and—if I am not mixing metaphors—may gain us a sympathetic Press if the latter find that their shoes and ours pinch on the same spot.

Allwick G. REAVELL.

The Concrete House Competition.

SIR,—With reference to this competition, it seems to me the result is comparable with the rapidity with which the assessors made their award. The last day for receiving designs was December 10, and the assessors' report is dated the 13th.

Assuming that all the drawings were unpacked, ready for their inspection, on the morning of the 11th and the assessors were adjudicating for eight hours per day for three days, with a total of 700 designs submitted this allows about an average of two minutes to consider the merits or otherwise of each competitor's effort, on which he has probably expended one week's time. Taking each competitor's time as one week, a period of about 13½ years would be required by one man to execute the work which the assessors dispose of in three days, or probably less. I am sure it would be most interesting if the assessors would enlighten the competitors as to their methods of procedure in this matter, and particularly if the *jury together* examined every design submitted or only saw approximately one-fourth individually. The premiated designs seem to suggest the latter method was adopted. ONE OF TWO MINUTES.

Central Heating.

SIR,—May I be permitted to invite any of your readers who may be interested in a new point in central heating to inspect a trial installation which this Council has recently erected in Birmingham.

The installation is to illustrate the possibility of using very small bore light gauge copper tubing for central heating. In order to assure the necessary circulation a small electric-driven pump is included. As the water circulating very quickly comes back quite hot, it has been thought practicable that with this system some of it might be used occasionally as washing water, thus avoiding a separate installation; and as this necessitates steps to assure that the water shall not be rusty, brass radiators are being tried out as well as the ordinary iron ones. The fire, boiler, and pump are in a basement, and the heating is developed partly on the ground floor and much more on the first floor where are the main offices. The consumption of current for the pump is very small, and the fire is stoked cheaply with coke, slack, and rubbish.

By courtesy of the works in question, namely, Messrs. H. H. Vivian & Co., Ltd., Icknield Port-road, Birmingham, I am enabled to invite interested people to pay a visit, and if any of your readers would care to write to me on the subject, I should be happy to make the arrangements necessary.

GEO. W. MULLINS,
Chairman,
The Copper and Brass Extended Uses Council.

MEETINGS

FRIDAY, *January* 18.

London Society. Capt. F. W. Cable on "Collection of London Refuse." 5 p.m.

MONDAY, *January* 21.

Royal Institute of British Architects. Mr. Oswald P. Milne's criticism of the work submitted for R.I.B.A. Prizes and Studentships, followed by the presentation of Medals and Prizes by Mr. Walter Tapper, A.R.A., President. 8.30 p.m.

Northamptonshire, Bedfordshire and Huntingdonshire Association of Architects. Mr. J. Alfred Gotch on "Inigo Jones—a Modern View." At Luton. 3 p.m.

TUESDAY, *January* 22.

Smoke Abatement League. Mr. A. Marsh on "The Architect and the Smoke Problem." At the Town Hall, Manchester. 4 p.m.

WEDNESDAY, *January* 23.

L.C.C. Central School of Arts and Crafts. Sir Banister Fletcher on "Spanish Renaissance (1500-1900)." 6 p.m.

Royal Society of Arts. Sir Henry A. Miers on "Museums and Education" 8 p.m.

Incorporated Institute of British Decorators. Debate opened by Mr. G. G. Wornum on "The Relations between the Architect and the Decorator." At 9, Conduit-street, W.1. 5.30. p.m.

THURSDAY, *January* 24.

Society of Antiquaries. Dr. R. E. Mortimer Wheeler and Lieut.-Col. W. Hawley on "The Lydney Excavations: The Earthwork and the Temple." 8.30 p.m.

Victoria and Albert Museum. Mr. W. G. Constable on "Dutch Landscape." 5.30 p.m.

Institution of Structural Engineers. Paper by W. Basil Scott, entitled "Some Historical Notes on the Applications of Iron and Steel to Building Construction." 6.30 p.m.

FRIDAY, *January* 25.

Incorporated Association of Architects and Surveyors. Mr. Graham Mould on "Ancient Lights." At the Institute, 1, Wilbraham-place, Sloane-street, S.W.1. 7 p.m.

ROYAL INSTITUTE OF BRITISH ARCHITECTS

"DEVELOPMENT OF SOUTH LONDON."

MR. MAURICE E. WEBB, V-P., R.I.B.A., was in the chair at a meeting at 9, Conduit-street, W., on Tuesday, when Mr. H. V. Lanchester, F.R.I.B.A., delivered a lecture on the "Development of South London."

The lecturer said that many had been struck by the curiously subordinate position that the Surrey side had always held towards the City of London, but we had only to look at its site to see why London established itself on the north side of the Thames. Here at a convenient distance up the river for access to the heart of the country the high ground stretched right down to the river bank with a frontage a mile in length, and a return frontage up the Fleet available for small craft. The south bank, on the other hand, was mainly marsh from Greenwich to Putney, and any road approaching the river had to be formed as a causeway. Later on the marshlands were drained, but except in the borough development was limited to the frontage along the river.

About 1750 the movement towards laying out the Surrey side began, and during the second half of the eighteenth century a really magnificent road plan for this area took shape, while even subsequently several important additions were made, namely, Waterloo-road, Southwark Bridge-road, and Southwark-street.

Before the advent of the railways this district, despite its low level, held its own in point of dignity and amenity, but, unfortunately, owing to this question of level, when the railways came they were invariably overhead, and the numerous viaducts and bridges at angles out of accord with the street plan ruined the dignity of the whole area and depreciated it as a residential district, with the result that it lost ground as such too early for the buildings to be replaced by those for other purposes and became recognised as "second-rate." Not only was there the immediate effect of this invasion in the degradation of property and its use, but the loss of the initial dignity and order paved the way to a general neglect of those qualities and much more was lost that might have been saved. As an example of this there was the case of the Paragon in the New Kent-road, a gracious crescent of houses, that if removed might have been replaced by something of equal merit. As it happened the lay-out was changed, and what was now there was architecturally chaotic. In dealing with similar problems, naturally on a much smaller scale, he had first, said the lecturer, endeavoured to secure interviews with the representative men having interests of all kinds in the area involved; interested industrially, commercially, officially, or as residents, as property owners, or as in other ways linked up with life or work. From such interviews it was possible to obtain a comprehensive view of the pattern, as it were, of social and economic activities, to see why the position was essential for some purposes, merely convenient or perhaps only tolerable for others, and definitely inferior or obsolescent in cases where change was overdue. If that method were systematically employed with a view to visualising the future of the area we were considering, it would be practicable to frame a programme for the future, and without such a programme there would be little hope for a clearly defined ameliorative plan, let alone a really worthy scheme for improvement such as would place the Surrey side in its proper position as an integral part of the metropolis.

North of the river commercial centres of various types were jostling each other, many were congested and rents had been forced up to exorbitant heights. In the city banking, stockbroking, bill broking, wholesalers in dry goods and other trades, importers, shipping firms, and many other business groups were all competing for accommodation. There had been a steady expansion along the northern margin of the city, but no group of interests had been able to take the leap across the river, this having always appeared as too definite a barrier. Businesses and factories not so closely linked with such groups had located themselves on the Surrey side, which had also had its own trades, such as timber, tanning, etc., but so far there seemed to have been no possibility of its acting as a safety valve to release the pressure on the north of the river. The comparative value of the land showed at a glance the failure in this respect.

Was there any remedy for this? To some extent he believed there was. No group connected with finance could be thought of as a possible migrant, but the others were not so integrally bound together that it might not be worth while for some to take advantage of the cheaper land and more spacious roads of the south side. He was not prepared to say which, as every industry or business had its own special requirements as to transport and services, and those would have to be studied before any opinion could be formed. Moreover, north and south would have to be brought into closer contact with each other before any such migration could be regarded as possible. Such a union seemed to demand something more than a mere multiplication of bridges, at any rate, bridges of the recognised open type. These in our climate did little to diminish the effect of separation. Old London Bridge, with its street of shops, must have been much more satisfactory from that point of view, but one would hesitate to advocate the resuscitation of this type, blocking up our fine river vistas. Something less obstructive might be devised which would yet give an impression of intimacy and shelter.

Double-decked bridges were architecturally practicable, which would, if desired, accommodate lines of shops. Several types of arrangement might be suggested, and the height required would not be unduly obstructive as the present bridges ranged from a level of 36 feet to 50 feet at the crown. He would, however, put more faith in rapid transit by tube for the public and in a skilfully reorganised road system, co-ordinated with the railway depots, to improve transport facilities. As regards the tubes, the union of these with the busy suburban lines of the Southern Railway was a scheme he had advocated for some time past. It would immeasurably increase the convenience in getting into the City and West End, and would also bring South London more into the picture.

As regards the road system, it should be considered mainly in conjunction with the industries we might hope to be able to locate here, and the services these would demand. For example, a bridge at Charing Cross with good approaches might bring in wholesale houses supplying the great retail stores in the West End, provided the railway connections were appropriate for the supplies from the provinces and abroad. Thus one could see that nothing could be achieved without looking at the problem as a matter of organisation from start to finish. It might seem absurd that land on one side of the river should have (disregarding the very valuable area in the heart of the City) eight to ten times the average value of that on the other, but there were good reasons for this at the present moment, and the only way to bring about a more reasonable proportion was by a studied improvement in the facilities for such uses as could reasonably be anticipated. With reorganisation on these lines a large slice of the low-lying area could be transferred from residential to commercial occupation, and the inhabitants removed to more attractive districts. By reason of the improved passenger services this would not cause any hardship.

There were a few obvious defects in the existing road system of the district, such as the over-concentration of traffic at the Elephant and Castle, but those would not be difficult to remedy in view of our recently gained experience in traffic regulation. As we knew, the provision of main routes was liberal, and a few supplementary by-passes were all that was needed.

There remained the much-debated question of the treatment of the river bank itself, and the reasonable proposal for an embankment on this side. In view of the demand for river frontages by commerce it was perhaps doubtful if a low-level embankment was justified, though it was architecturally the obvious solution. As an alternative a high-level road might be made along the river frontage from the County Hall to London Bridge and the warehouses carried out under it to the waterside. This would give an additional route from Westminster to the City not unduly diminishing the width of the river and retaining the rights of frontages.

As regards the proposals for Charing Cross Bridge, he did not think it prudent to discuss these at any length while the scheme was in a way *sub judice*. That it could remain in its present form he did not for a moment imagine, as the viaduct approaches were unsatisfactory from the three points of view of architectural dignity, economy and traffic requirements. Then, again, there was the long-standing difference between those advocating low-level and high-level bridges respectively. The decision between these would have to rest on an aspect of the question that had never been properly tested. Would the bridge be more useful as an additional link between the areas near the river, or as a connection between districts more remote by-passing, as it were, those areas and leaving them to be served by existing bridges? That question should be decided preparatory to the consideration of what the type of bridge and approaches should be.

The same question arose in the matter of any bridge within the area of the city, with this difference only: that there it seemed more obviously desirable that an additional traffic route should be distinct from the existing ones with the purpose of connecting districts to the north and south clear of the volume of traffic running east and west. So far our review of South London had been limited to the area in proximity to the river, and even as regarded that, mainly to the question of its commercial possibilities. Much, however, was bound to remain residential, and if only it were possible for the L.C.C. to proceed faster with their admirable schemes for rehousing, we should have no reason to be ashamed of this aspect of South London. When we came to consider the broad outer zone, the aspects it presented to us did not specifically differ from those of the other suburbs of London. Physiographical differences there were, which naturally influenced planning, but the demands were hardly dissimilar; immense areas covered with houses, subsidiary business centres marking the locations of the original villages or more recently established near suburban railway stations, the old highways, usually overcrowded, and a lack of good roads commensurate with the traffic needs of to-day. It was true that several by-passes had been made in accordance with the general scheme laid down for the metropolis, but South London was still by no means a place which it was easy to get in or out of. Possibly the private motorist might adopt the course of garaging at a marginal point adjoining a station, on the lines of the Liverpool men who resided in the Wirrall and whose cars occupied a very large garage at Hamilton-square, Birkenhead, but considering what good roads Southwark and Lambeth offered it seemed a pity if some improvement could not be made in the organisation of those farther south. There were many that could be widened without destroying any buildings owing to the depth of frontages or the proximity of open ground.

A vote of thanks to the lecturer, proposed by Mr. Arthur Keen, F.R.I.B.A., and seconded by Lt.-Col. C. B. Lovita, was carried with acclamation.

"THE BUILDER" DEBATE

XIV.—SMALL HOUSES, DETACHED OR SEMI-DETACHED?

SIR,—"Negative" has fallen into the common error in debate of exaggeration, and perhaps I am not quite guiltless myself in this respect. But I feel that he has destroyed his case in the first paragraph of his letter by implying that the general disease of ugliness in the estates of small houses to-day is only a "detail" in the social order. To me, it is the outward expression of a general inward ugliness and disorder in the social scheme of things itself. I will not deny that if architects had a larger share in the design and lay-out of these estates they would probably be of improved appearance; but this is beside the point. It is not a question of why the public does not make full use of its architects, but of why it has no apparent desire for beautiful surroundings.

The cause of this state has nothing to do with the builders or the estate agents or the architects, but arises out of a public conscience that has long been dulled by false standards and sham superstitions. The detached mania, as I shall continue to call it, is the mark of a section of society too timid and dependent to live out in the country, and too lacking in good comradeship to rub shoulders honestly with its neighbours. It is an absurd attempt to make a compromise between rural independence and urban convenience, and like most compromises it succeeds only in falling between the two stools.

I have sufficient faith in my instincts to take my instinctive dislike of the cube as an architectural unit as a pointer away from a false position, and I have no faith in the ability of my brother architects to camouflage the cube into something which it is not. "Negative" is willing to saddle himself with this problem, but unwilling to tackle the difficulties of planning which the terrace lay-out does undoubtedly produce. If he is going to pick and choose between his problems, he must at least permit me a similar licence.

Planning has advanced enormously within the last twenty or thirty years, and the terrace problem is not without its solution. I do not propose to do anything but accept this possibility as an axiom, and then examine the objections which "Negative" has raised. He says that all of them represent sacrifices of the occupiers. I suggest at the outset that the occupiers are already making the biggest sacrifice of all by living in the midst of ugliness, and that anything that can release them from this state can hardly be called a sacrifice.

First come the neighbouring noises. It is always an extraordinary thing to me that the cream of society, so called, willingly migrates to town for the season and forgets its imagined need for isolation. Party walls, under such conditions, appear to lose their nature, and all is well. Is it not nearer the truth to say that ordinary folk who share a street with others have no real desire for isolation at all, beyond what has been pumped into them by others too ignorant to understand their own teaching?

Then "Negative" assumes the inevitability of awkward house plans, and I have only to refer him to the skill of the scientific house planner to get over the difficulty. In objecting to the suggested position of the garages in "mews" at the back he ignores my alternative of the garages in the front, but linked up under a main roof, and usefully built over on the first story. The first is the cheaper idea in all probability, and the latter the more luxurious. Naturally, luxury must be paid for in money, and cheapness paid for in some sacrifice to convenience. That applies to all systems of building. The charlady's washing is a trifling detail not unconnected with fencing.

Quite frankly, I can see nothing to admire in a man's desire for false detachment. I do not believe any great citizen is likely to arise out of such a false position. We are either urban or rural by habit. If we are of the towns, we are a part of a unified community, necessarily somewhat of a pattern to share willingly the same social services. The architect must express this feeling if the best of town life is to be made evident in its buildings. In pandering to anything else he is simply perpetuating and fostering a false and foreign element. Nature has given us eyes to see ugly things that stand for ugly ideas, and here she shouts out for us to close our ranks in citizenship, or to spread out into the free isolation of the country, or what is left of it.

The first architect or estate owner who has the courage to recognise these facts, and lay out an estate in orderly terraces, each in itself a fine architectural unit, is likely to go down to history as a pioneer of courage. But his voice will never be heard so long as we of the profession continue to bow to the facile as though to the inevitable, and spatter the countryside with units too small to be worthy of unity. I dislike "Negative's" assumption that we are to supply whatever society demands. Such a proposition would justify the martyring of the early Christians. Our part is rather to teach society its needs than supply its imagined wants.

POSITIVE.

THE ARCHITECTURAL ASSOCIATION

LIVERPOOL CATHEDRAL.

THERE was a good attendance at the Architectural Association last Saturday afternoon, when Professor C. H. Reilly, M.A., F.R.I.B.A., lectured on the new Liverpool Cathedral. Sir Frederick Radcliffe (chairman of the Cathedral Building Committee) presided.

Professor Reilly said the problem before Sir Giles Gilbert Scott, when setting out to design a cathedral for Liverpool, or, rather, for the group of towns in the Mersey valley, was such a problem as had never faced any architect in the past. Sir Christopher Wren, when designing the new Saint Paul's, had in view a town of fifty thousand people, but the architect of Liverpool Cathedral was designing for a million. Another point to keep in mind was that the building was to harmonise with a frame of mind entirely different from that which had produced Liverpool's great rectangular blocks of business buildings. Architects had chosen for its erection a place where converging roads made a monumental site near the centre of the town; but the Building Committee, consisting of laymen, chose a site a little further out, on a point called the Saint James's Mount, where a low range of hills that encircled the town ran parallel with the river. The beauty of this site was that it helped to isolate the cathedral. With such a vast area to be dominated it was essential that the building should be raised up, and there were other inspiring qualities in the site. At the back of the mound was a disused quarry from which had been got in old days the stone for most of the city buildings, but which had long ceased to be a quarry and had been used as a burial ground.

The new problem of building for a million people made it necessary to isolate the edifice and make it stand out above the town, physically and spiritually. How was this to be done? By symmetry. The new thing about the building was that it was symmetrical. When completed, chancel and nave would be of equal length and there would be four transepts buttressing a great central tower; Chapter House and Lady Chapel would be little buildings above which the cathedral would rise as a great ship rose above its attendant tugs, and it would stand out as a symbol, dominating the great area of buildings, with the great commercial edifices in the distance separated from it by a dip in the ground.

Some people called the great cathedral Classical, others called it Gothic. It had the statis quality of a Classical building with the aspiration of a Gothic one. Its designer had given us new vistas for Gothic architecture. We remembered what a linear style the old Gothic was, how hard and well-marked were the lines; but Liverpool Cathedral had fine, broad modelling and great walls that gave the solemnity and dignity of a fine Classical building.

As regards the interior, the speaker said he had once asked Sir Giles Gilbert Scott what impression it was desired the beholder should feel on entering the cathedral. The reply had been, "What I want the people to feel when they enter this building is the need for prayer." When one entered the cathedral, with its tremendously thick walls, and windows set back so that there was nothing before one but the great pathway to the altar, one had the feeling that the great commercial town of Liverpool had disappeared, and that one had entered into another world. That this should have been done in our own time, when we little thought we could build a cathedral again, seemed an extraordinary achievement. It was an extraordinary thing, too, that on any fine Saturday afternoon there would be found a line of char-a-bancs coming from the various Lancashire towns bringing people to see a modern building of which only one-third had been completed.

The lecturer showed the design as it had been originally, the design with which the architect had won the competition. This, he said, was a fine design of the old type, but the new one was entirely different from it.

There had been associated with young Scott a very experienced architect, who had been one of the judges of the competition, G. F. Bodley, R.A. But the result of this association had been that the character of Scott's building was gradually whittled away. The thing became more mediæval. However, after five years Mr. Bodley died, and the young architect was left untrammelled. In the result he had produced a new design, and it was a marvellous thing that notwithstanding part of the building had been erected according to the original plans, it was the new design that was being built to-day

The Chairman, on behalf of the audience, thanked Professor Reilly for his lecture. Reference had been made to the fact that the Building Committee, of which he (the Chairman) was probably the only surviving original member, had been indulgent in encouraging a young architect, as his ideas grew, to exercise his powers to the full when he thought he could improve on his original designs. But it had not been without considerable doubt and trepidation that this had sometimes been done. In the original design there had been two towers. Before the design was changed the foundations for these towers had been put in, and on one side had been carried down fifty feet to reach the solid rock. When, although the foundations were in, the architect wished to substitute one tower for two, the Committee said, "Think it over for a year and try what you can do." After that they had waited until at last it had been necessary to say, "You must either have two towers or one." Then the design for a single tower was produced, and the architect allowed to start again with fresh foundations. It was necessary to have an intelligent laity, reasonably intelligent clients, before an architect could be permitted to take such latitude at so great a cost. He (the speaker) never entered the cathedral without a sense of something very great, or without the curious thrill which was the effect of every work of genius

ILLUSTRATIONS

PLATES

St. Peter's Hospital, Bristol.

St. Peter's Hospital was originally built about 1500 as a residence of a famed alchemist, Thomas Norton, but was much altered and embellished in 1612 by Robert Aldworth. The front is a rich specimen of timber work with carved brackets and gables, and wide projecting windows. The building has undergone many vicissitudes; after being abandoned as a merchant's residence it was converted into a sugar refinery. Afterwards it was converted into a Royal Mint, where many silver coins were struck in the reign of William II. In 1698 St. Peter's Hospital was acquired as a workhouse for indoor paupers of the city who were employed in weaving and pin making, and has finally become the offices of the Bristol Board of Guardians. The old Court room is of great magnificence, and has a noble mantelpiece.

William Booth Memorial Buildings, Denmark Hill.

A description of these new buildings was given in our last issue, together with a full list of the firms engaged on the work. Some further illustrations of the building are given on the inset plates of this issue. The general contractors are Messrs. Griggs and Sons, and it may be mentioned that the whole of the plastering, including the fibrous plaster work, has been entrusted to Messrs. H. and F. Badcock, of 7a, Hanover-street, S.E.15.

Messrs. Alexander Gordon and G. J. Morris Viner, LL.R.I.B.A., with Sir Giles Gilbert Scott, R.A., are the associated architects.

Two Houses at Hampstead.

These houses were erected by Messrs. Robert Hart and Sons, Ltd. Multicoloured red bricks and tiles were used externally. The fireplaces were supplied by Messrs. G. Matthews, Ltd., of 38, Welbeck-street, W.1. Mr. W. Sydie Dakers was the architect.

R.I.B.A. (Alfred Bossom) Travelling Studentship.

This Studentship, Gold Medal and £250 have this year been won by Mr. Frank Scarlett, B.A., A.R.I.B.A., of the School of Architecture, London University. Some comments upon the R.I.B.A. Prizes and Studentships, together with a full list of the awards, were given in our last issue.

Old Harbour Station Site Competition, Ramsgate.

The assessor in this competition, Professor S. D. Adshead, F.R.I.B.A., has made his award as follows :—

First premium (£250).—Messrs. A. Minoprio and Hugh C. C. Spenceley, London.

Second premium (£150).—Mr. H. H. Stroud, 37, High-street, Ramsgate.

Third premium (£100).—Mr. H. Stanford, 40, High-avenue, Letchworth, Herts.

It is claimed for the winning scheme that it provides, in a straightforward way, all the accommodation demanded and suggested by the programme.

Features of the scheme are as follows :—

General Description.—The lay-out is arranged to allow free circulation of large crowds. The three principal buildings are the swimming bath, the band enclosure, and the bathing establishment. These are placed at intervals along the site, linked together by rows of shops, the band enclosure forming the centre of the group. Other accommodation includes shelters, lavatories, day chalets and kiosks.

Traffic (Vehicles).—As the site is on a short loop road, through traffic is but a small portion of the whole. The 20 ft. roadway is considered to be ample; it has been lowered to the level of the Esplanade. The majority of cars coming to the site arrive at the south-west end : for this reason the parking place is situated here, between the swimming bath and the cliff, a position which would be unsuitable for anything else demanded by the programme.

Traffic (Pedestrian).—The entrance to the site from the south-west is marked by a row of three kiosks, which are placed on one side of a large square and form an open gateway to the scheme. The Esplanade has been enlarged. The pavement is 30 ft. wide for more than half its length : combined with the roadway it forms a splendid promenade. Access between the site and the cliff-top is improved by the addition of three ramps. Two start from the ends of the Wellington-crescent promenade, and finish near the centre of the attractions on the site below; here are placed an information office and a police ambulance room. The third ramp takes the place of the Augusta Stairs, which are uncomfortably steep.

Swimming Bath.—The walls and roof of the old station are retained to enclose a swimming bath, which can be decked over with a floor when the building is to be used for other purposes. At ground level there are 164 collapsible dressing boxes, a swimming pool measuring 100 ft. by 40 ft., office and towel rooms, slipper baths, artistes' rooms, sprays and lavatories, laundry and decking store. In the basement are the cloak-rooms and lavatories for concert audiences, heating and filtration plants, fuel store and stokehold. The caretakers' quarters are placed over the artistes' rooms, and the gallery is built round the main hall.

Band Enclosure.—The band enclosure seats 1,004 persons—484 in deck chairs and 520 in fixed seats under cover. The bandstand is raised, and has a hood which serves both as a sounding board and as a protection for the band; there are retiring rooms behind.

Sea Bathing.—The sea-bathing establishment contains 451 cubicles, an increase of 50 per cent. on the present number. They are connected directly to the sands by straight subways lit by pavement lights, and open at both ends.

Shops.—There are 32 shops which average 15 ft. square, giving a total of 7,200 square feet of rentable floor area. Most of the shops are at the back of the site, where their business will not congest the esplanade.

Day Chalets.—There are 28 modern "chalets" averaging 10 ft. by 10 ft. They are raised on steps, and have a veranda overlooking a garden at the quieter end of the site. This group is provided with its own lavatories and chair store.

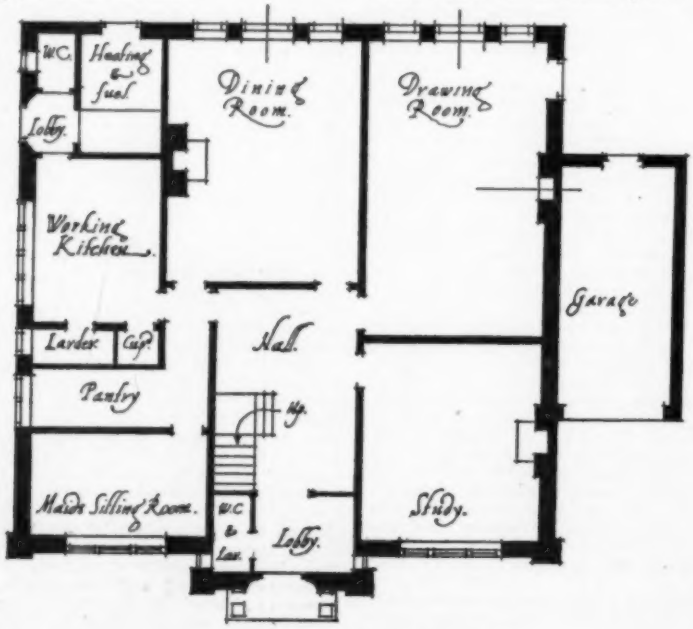
Shelters.—A row of shelters raised on steps is placed against the blank wall of the swimming bath facing the sea. There is a corresponding row along the front of the sea-bathing establishment.

Lavatories.—Men's and women's lavatories are placed at intervals along the esplanade in pairs readily accessible from all parts of the lay-out and from the sands.

Cliff.—The cliff is buttressed by concrete arches flush with the chalk face. The line of arches is carried across the tunnel entrance to mask this feature which, if retained, would mar the sweep of the cliff. The tunnel has outlived its usefulness, and, like the Augusta Stairs, is an evesore which must be removed before any satisfactory treatment of the East Cliff can be achieved. The iron bridge above the tunnel has been removed, and the roadway straightened out.

Furnishing.—The site is furnished with lamps on 12 ft. standards. Two scarlet masts 60 ft. high flank the band enclosure. Seats are placed in recesses off the walks. Drinking fountains are provided on the outside of the lavatory walls.

Materials.—The shops, lavatory blocks and entrance to the sea-bathing establishment are of Sussex stocks, similar to those used in the former station building, with Portland stone dressings. The band enclosure and shelters have white-painted columns and cornice of cast iron, with glazed wood partitions. The whole scheme has been designed to harmonise with the Regency buildings, which are such a pleasant feature of the town.



Plan of House at Hampstead.
MR. W. SYDIE DAKERS, L.R.I.B.A., Architect.

Carr Crofts Baths and Washhouse, Leeds.

The assessor's award in this competition is given under "Competition News." We illustrate this week the first and second premiated designs, by Messrs. J. C. Prestwich & Son and Messrs. H. Guy Holt & Hubert A. Thomas respectively.

Meon-road Elementary School, Portsmouth.

This school is arranged for 1,200 children in three departments, 400 in each, boys, girls and infants. The architects, Messrs. A. E. Cogswell and Sons, of Portsmouth, were instructed to design a school of one story only, and on fresh-air principles, and on giving consideration as to the best method to adopt, came to the conclusion that the usual system of arranging the classrooms, etc., around a quadrangle with a substantial wall with windows and doors on each side of the classroom, and an open corridor on one side, could be materially improved upon by adopting a system of sliding partitions which

(*Continued on page* 170.)

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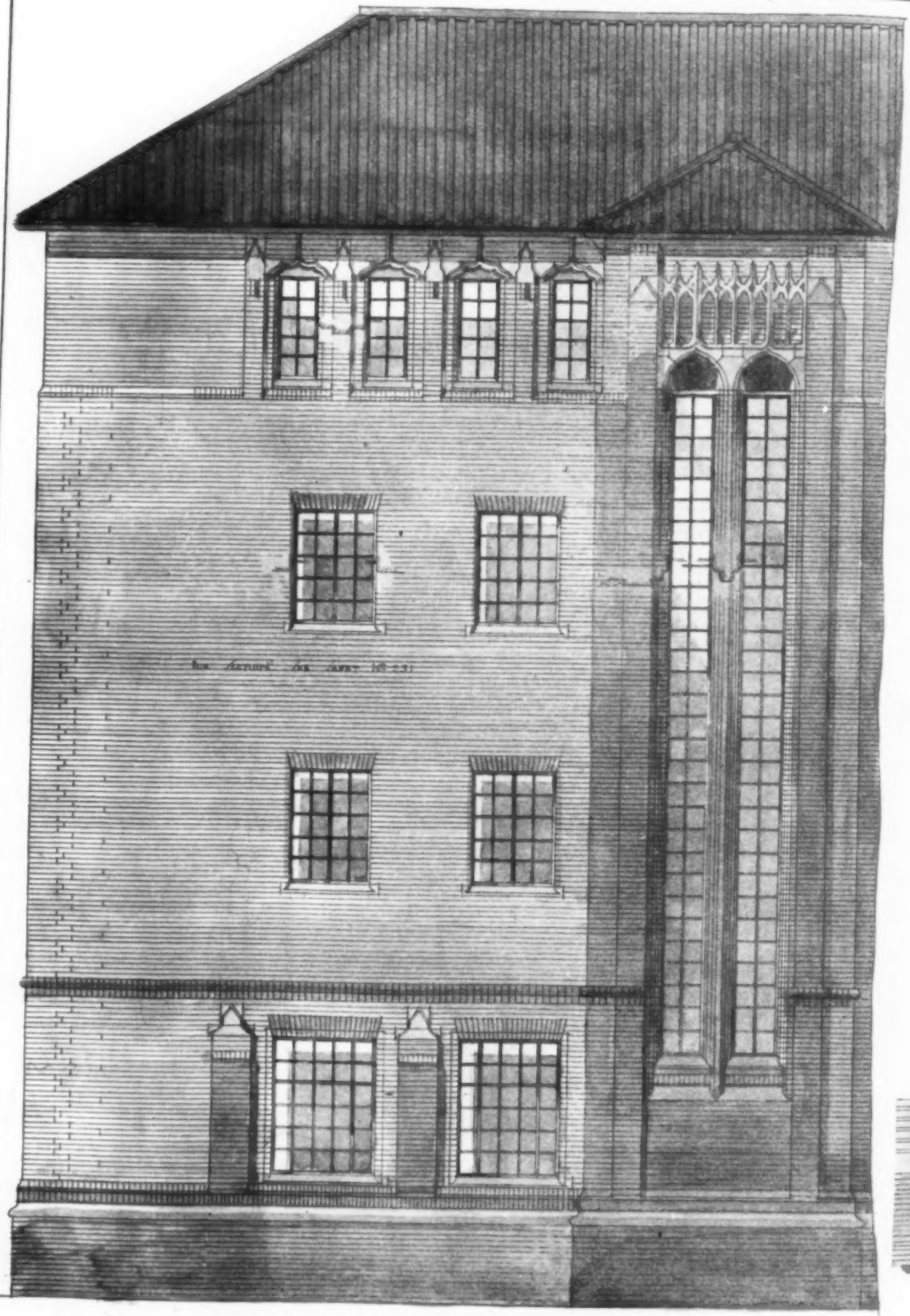
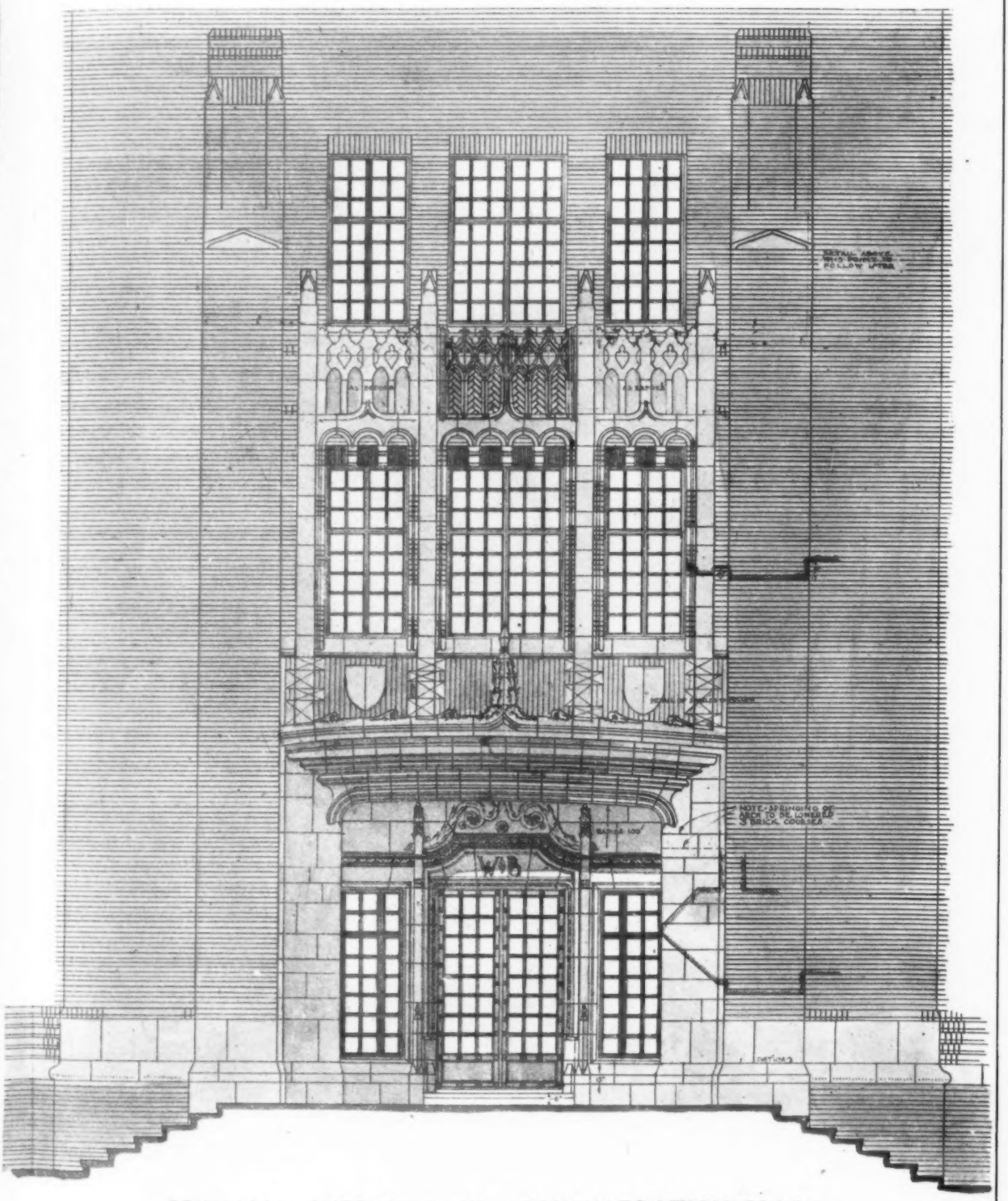
OF THE
UNIVERSITY OF ILLINOIS



TYPICAL DETAIL OF HOSTEL ELEVATION

THE WILLIAM BOOTH MEMORIAL BUI

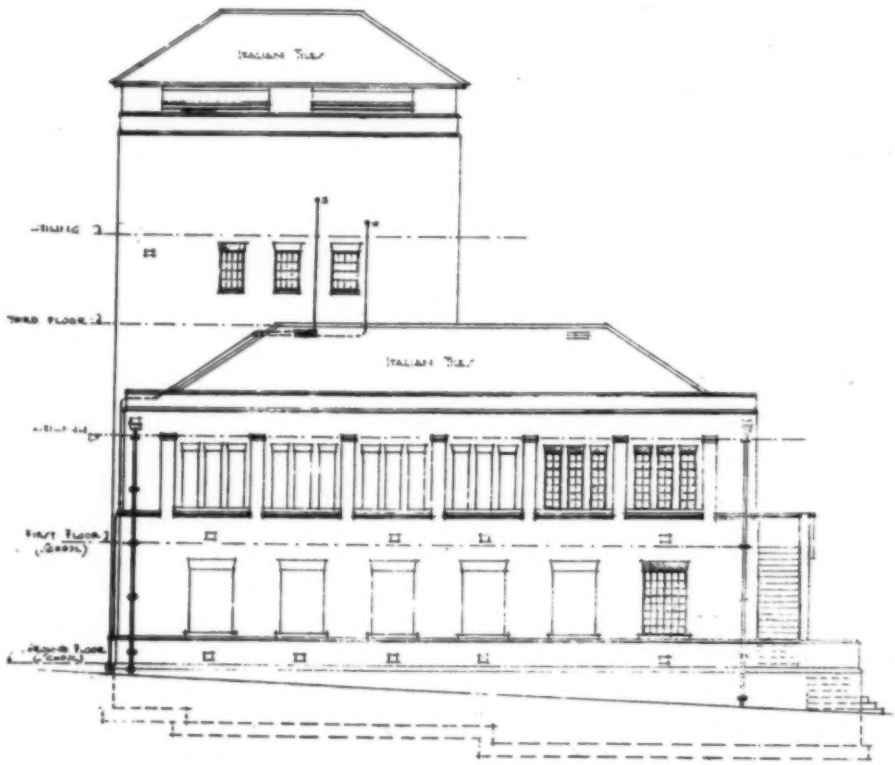
Messrs. Gordon & Viner and Sir Giles Gilber



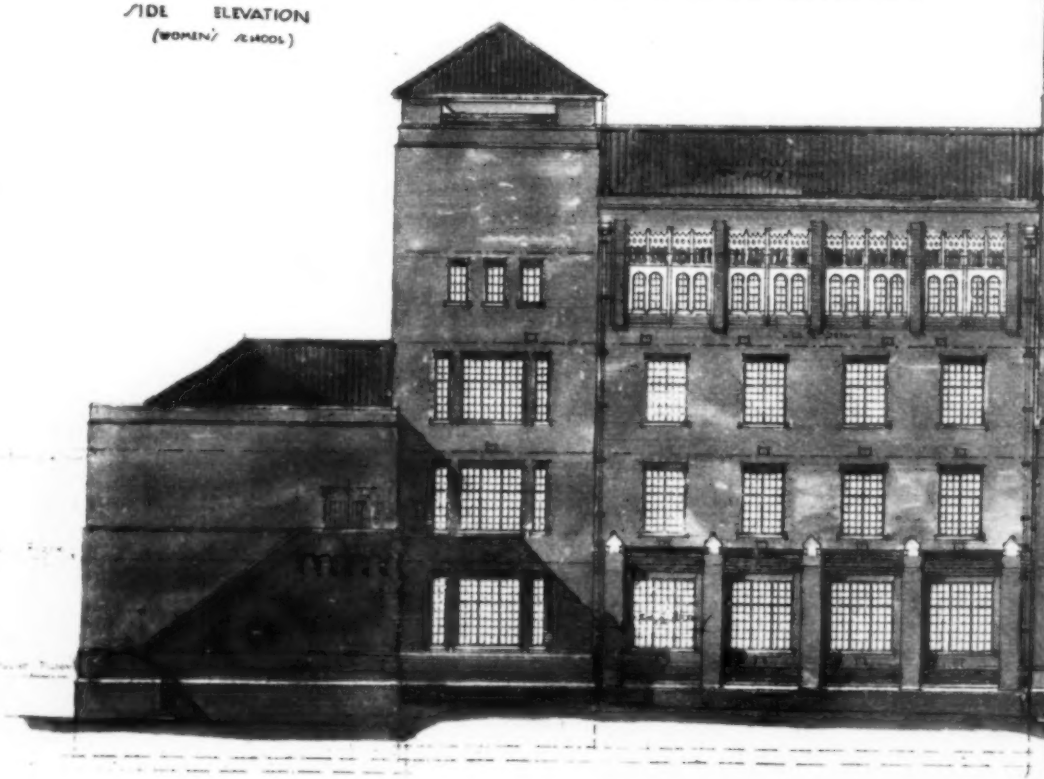
PRINCIPAL ENTRANCE IN ADMINISTRATION BLOCK

MEMORIAL BUILDINGS, DENMARK HILL, S.E.

Sir Giles Gilbert Scott, R.A., Associated Architects.



SIDE ELEVATION
(WOMEN) SCHOOL



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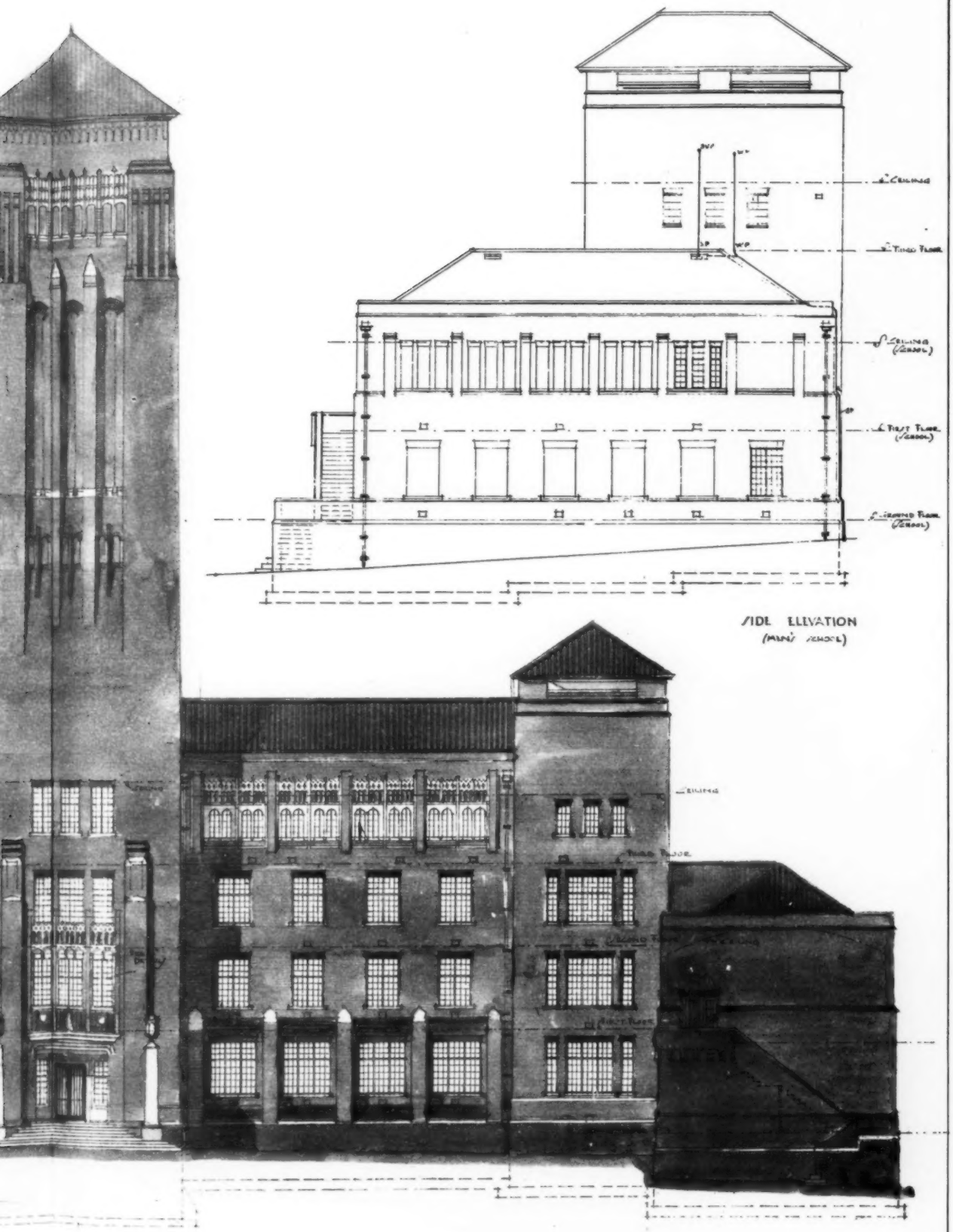
SCALE OF 0 10 20 30 40

THE WILLIAM BOOTH MEMORIAL BUILDI

Messrs. Gordon & Viner and Sir Giles Gilbert S



MEMORIAL BUILDINGS, DENMARK HILL, S.E.

ir Giles Gilbert Scott, R.A., Associated Architects.

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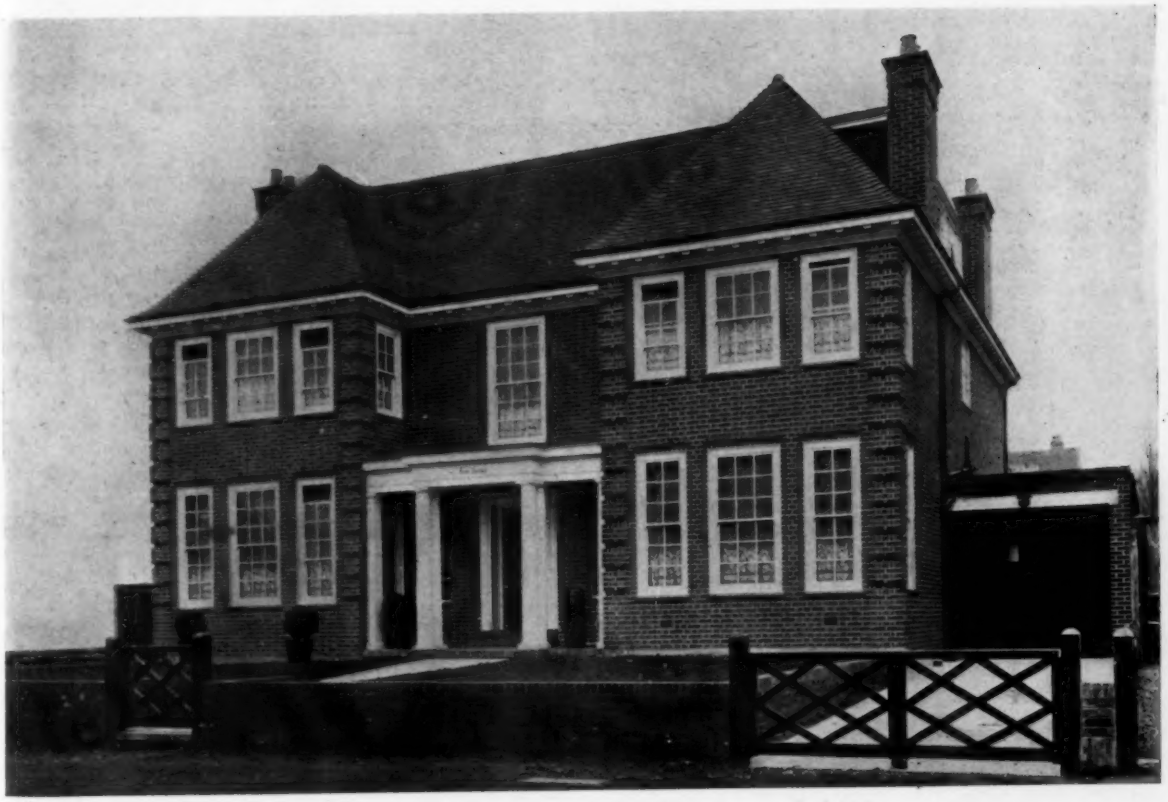

Two Houses at Hampstead.

MR. W. SYDIE DAKERS, L.R.I.B.A., Architect.

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Hall and Staircase of House at Hampstead.

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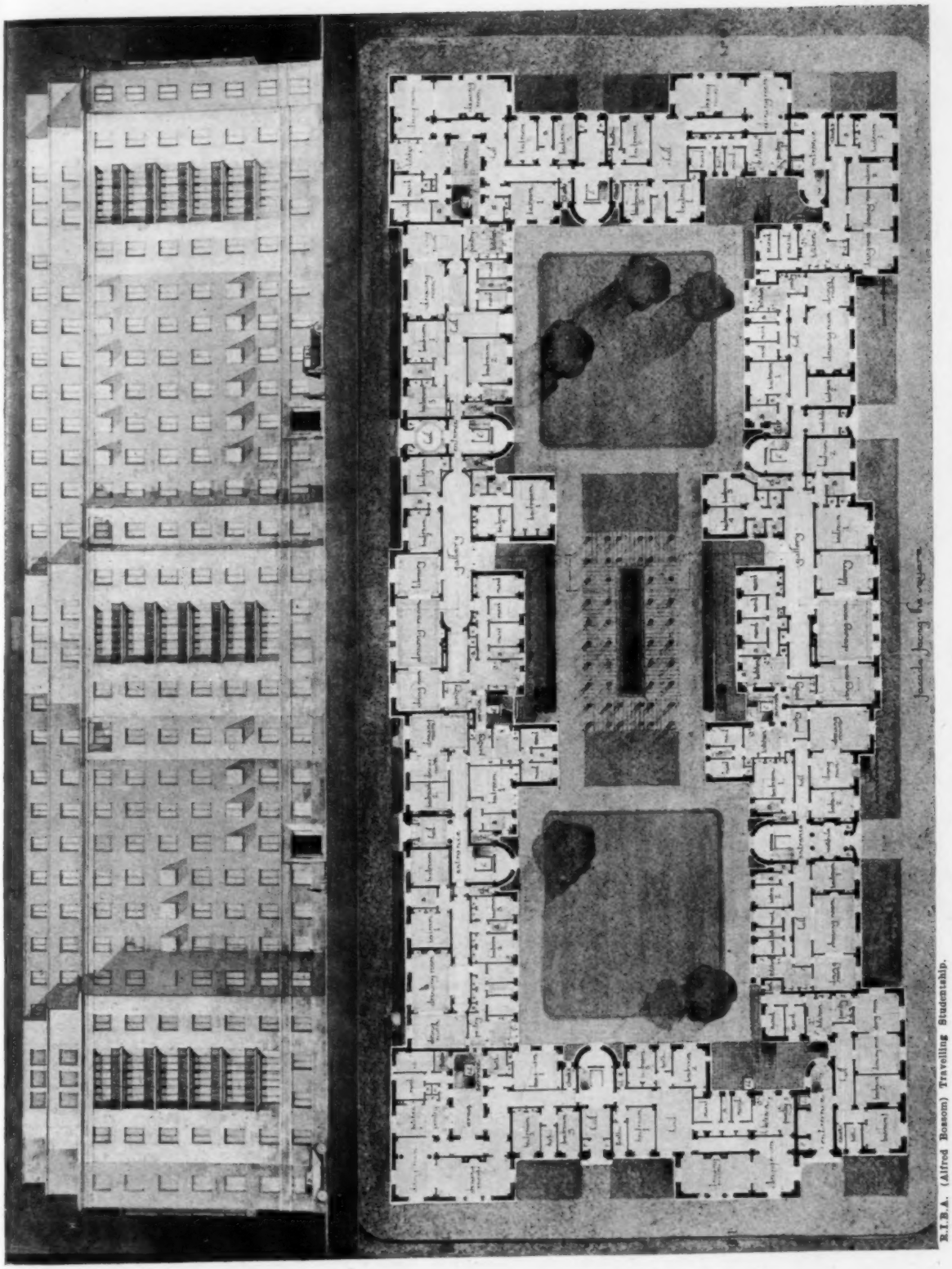
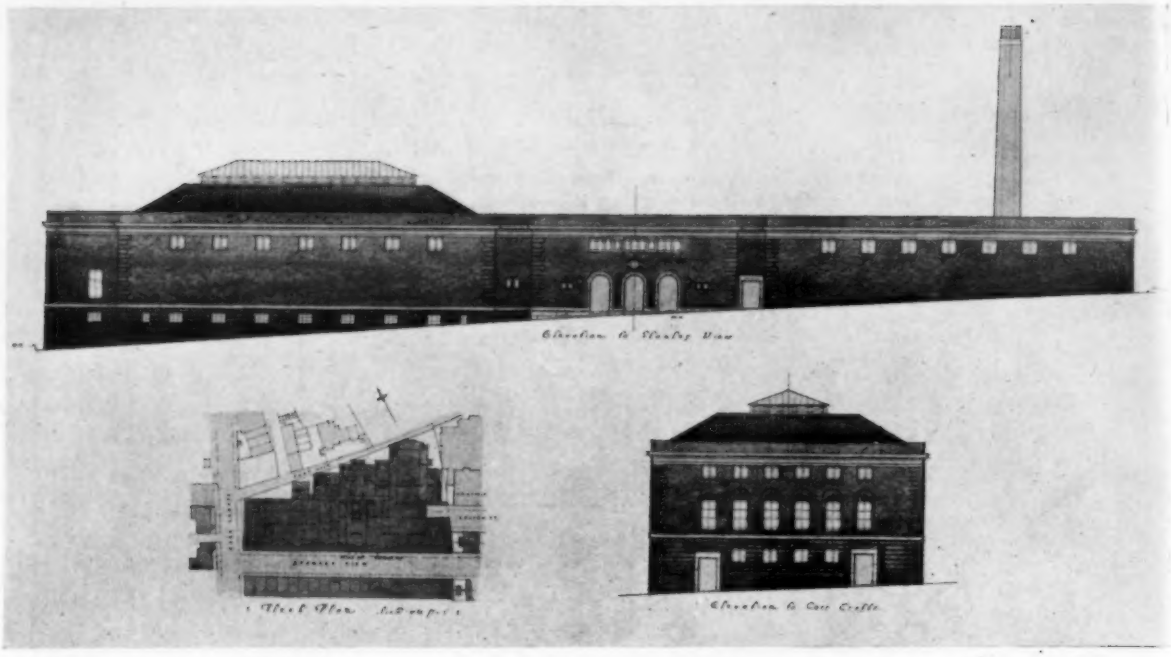
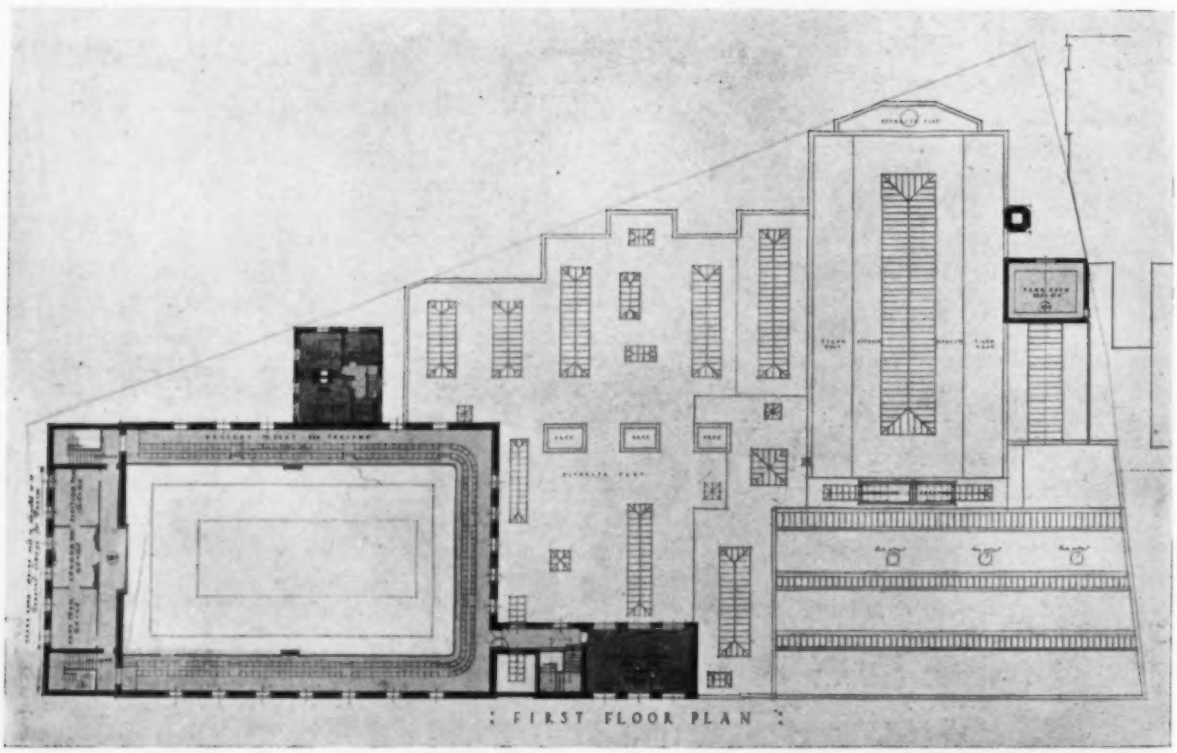


A First-class Block of Flats in the Residential Quarter of an Important City: Winning Design.

By MR. FRANK SOARLETT, B.A., A.R.I.B.A. (School of Architecture, London University).

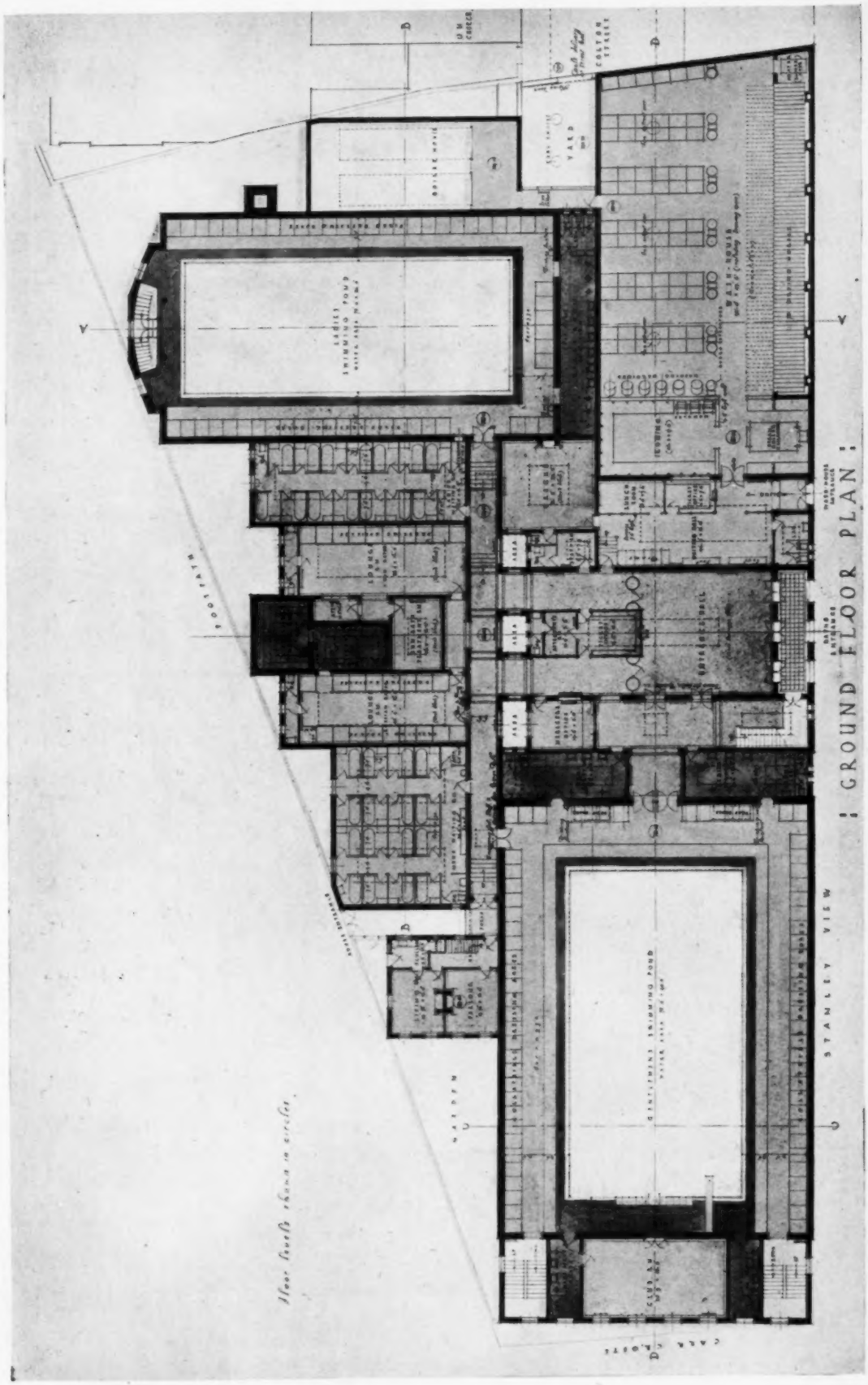
R.I.B.A. (Alfred Bossom) Travelling Studentship.





Carr Crofts Baths and Washhouse Competition, Leeds: First Premiated Design.

MESSRS. J. C. PRESTWICH & SON, Architects.



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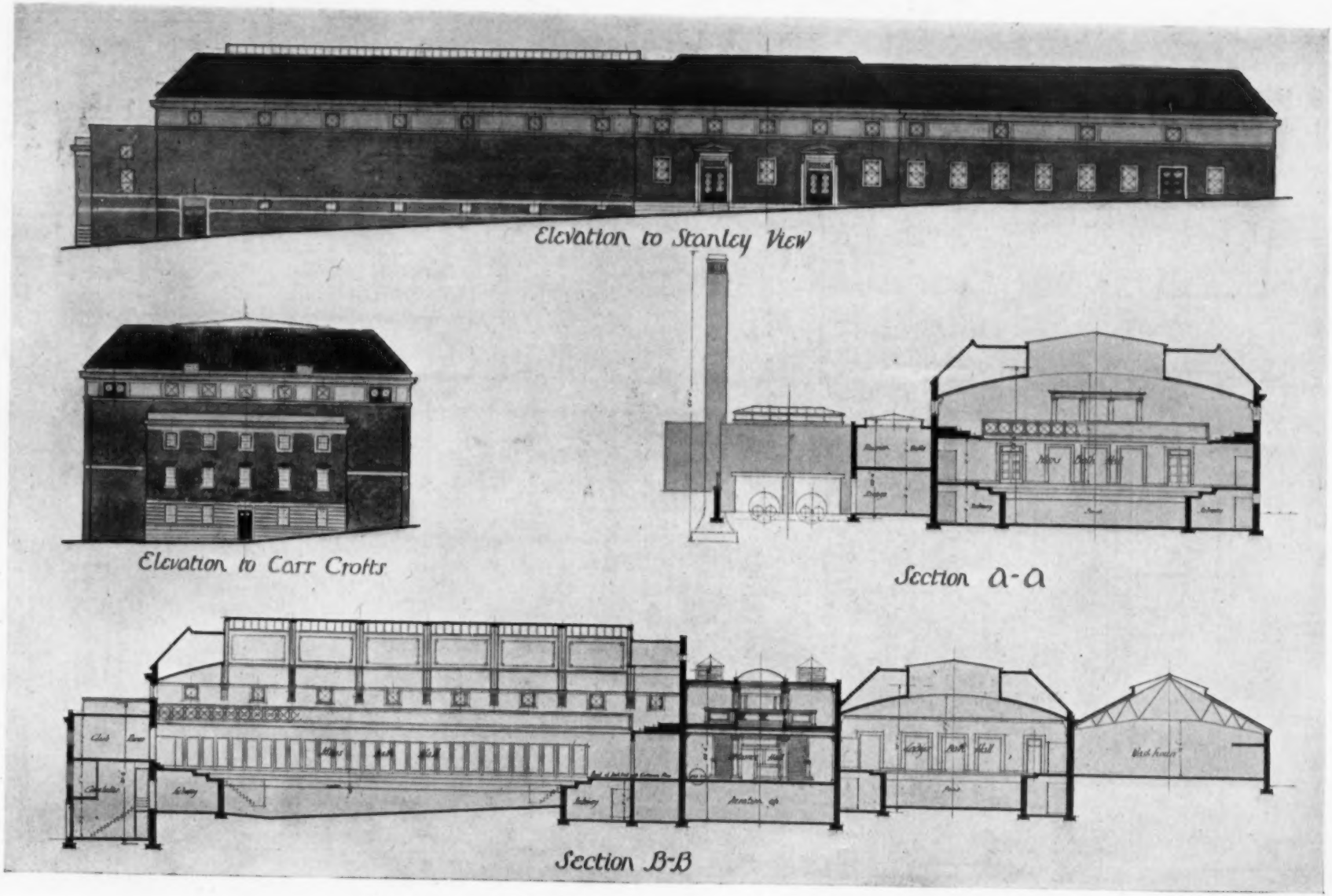
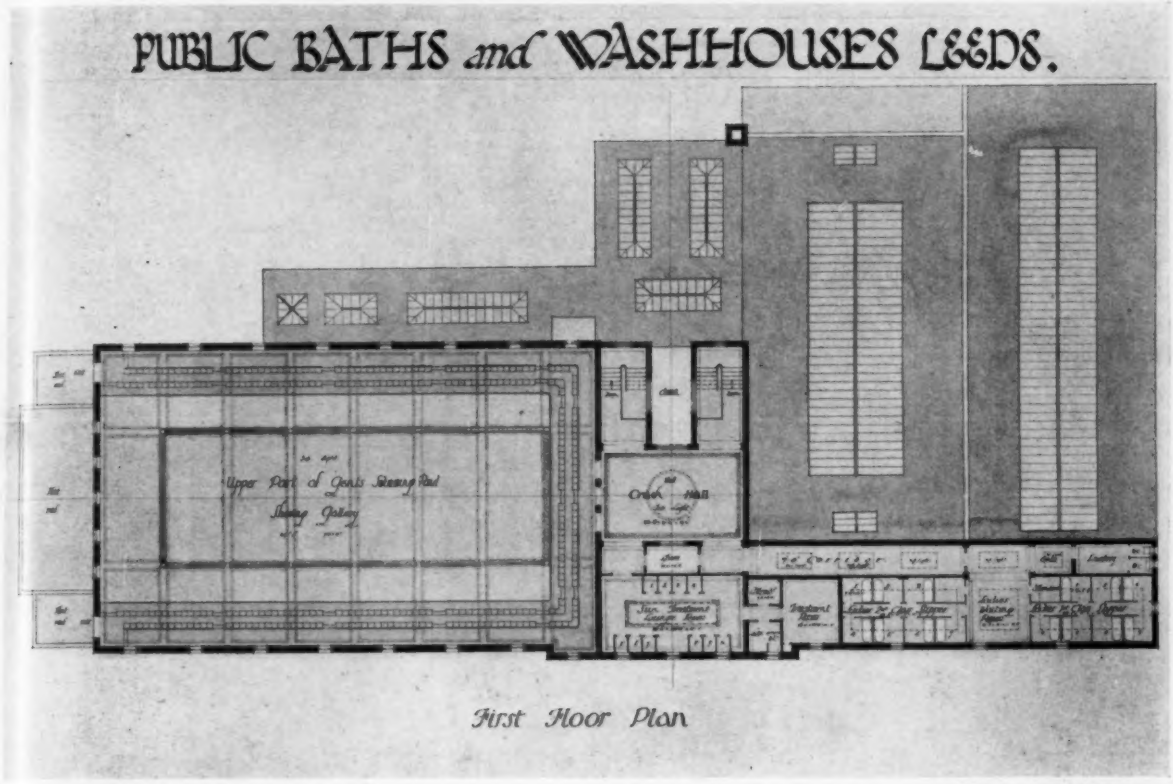
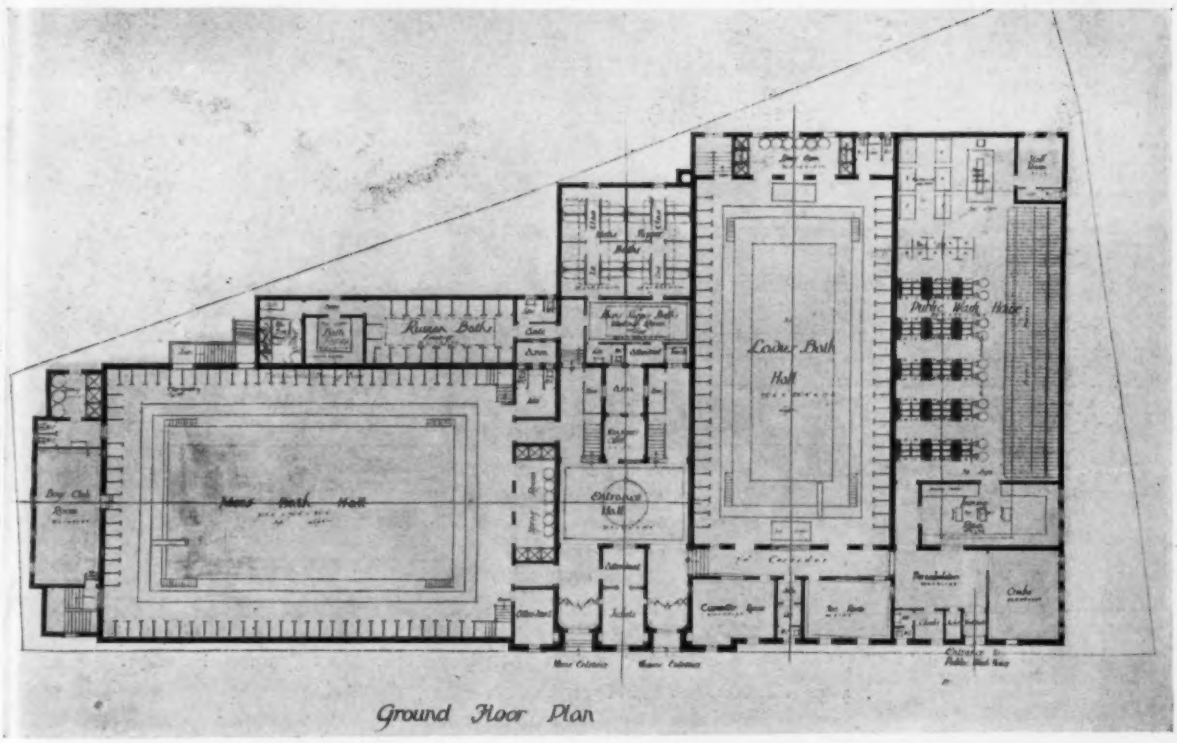


Carr Crofts Baths and Washhouse Competition, Leeds : Second Premiated Design.

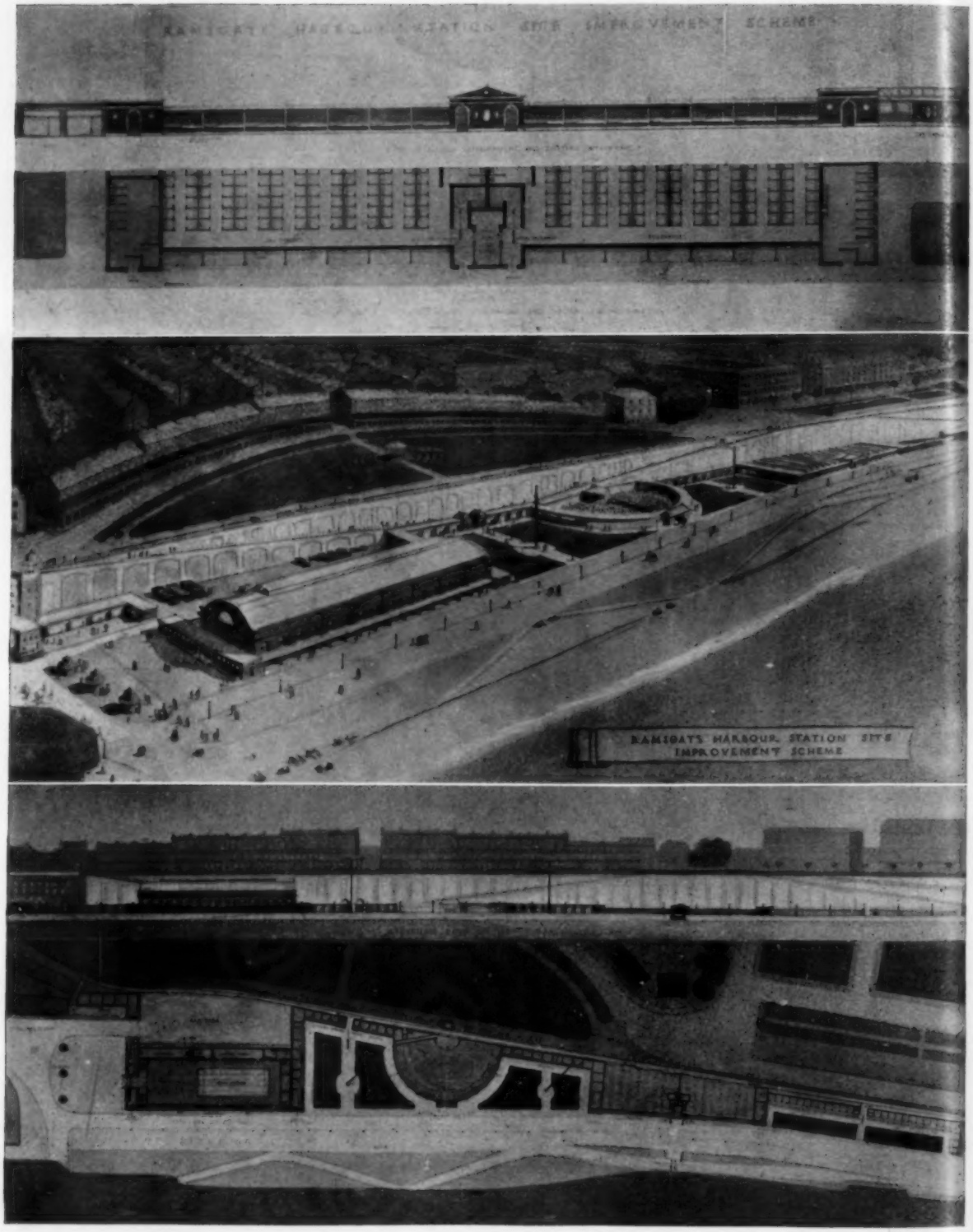
By MESSRS. H. GUY HOLT AND HUBERT A. THOMAS, F. & A.R.I.B.A.





Carr Crofts Baths and Washhouse Competition, Leeds: Second Premiated Design.

By Messrs. H. Guy Holt and Hubert A. Thomas, F. & A.R.I.B.A.

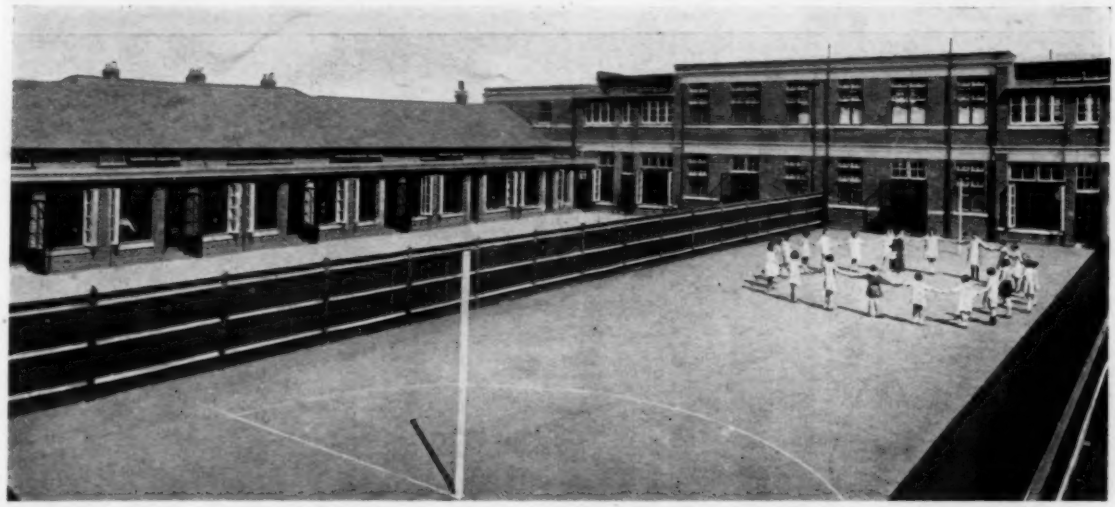


Competition for Lay-out of the Old Harbour Station Site, Ramsgate: First Premiated Design.

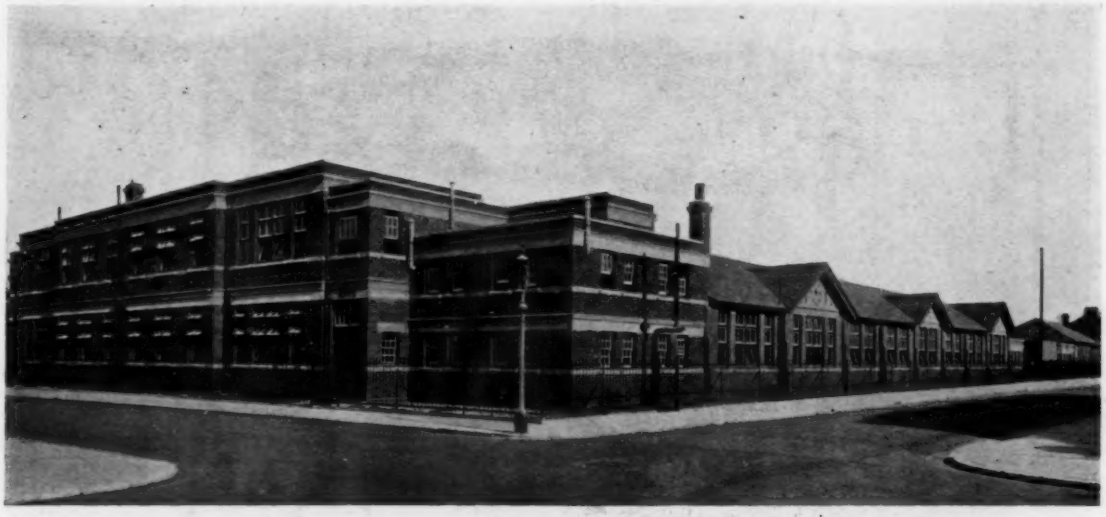
MESSRS. A. MINOPRIO and HUGH C. C. SPENCELEY, Architects.

NOTE.—The top portion shows the lavatories, bathing establishment and shelters.

PART OF INFANTS' PLAYGROUND WITH CENTRAL HALL, SHOWING OPEN SLIDING WINDOWS OF CORRIDOR.



GIRLS' AND BOYS' PLAYGROUNDS AND CENTRAL HALL COMMON TO BOTH.



VIEW FROM NORTH-WEST.

Meon Road Elementary School, Portsmouth.

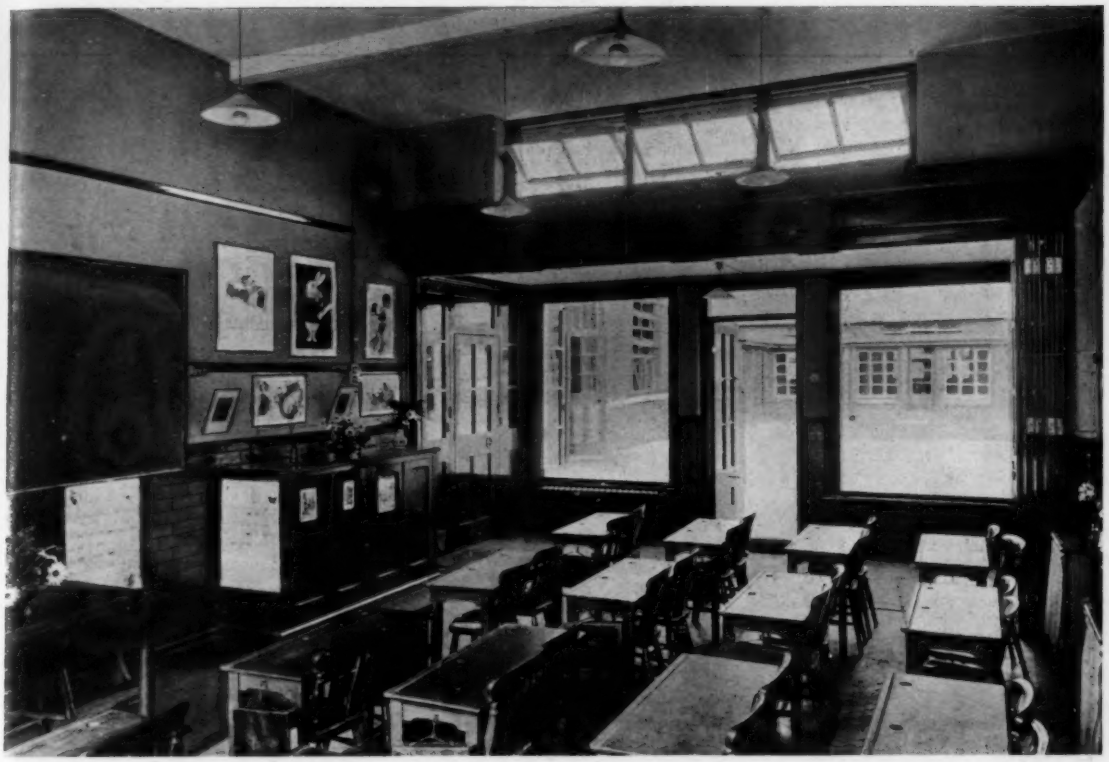
MESSRS. A. E. COGSWELL & SONS, Architects.

OUTSIDE OF BOYS' CORRIDOR, FROM GIRLS' PLAYGROUND.

LONG CORRIDOR OF BOYS' SCHOOL, WITH SCREENS ACROSS END OF CLASSROOMS (RIGHT HAND) CLOSED FOR WINTER WORK.

Meon Road Elementary School, Portsmouth.

MESSRS. A. E. COGSWELL & SONS, Architects.

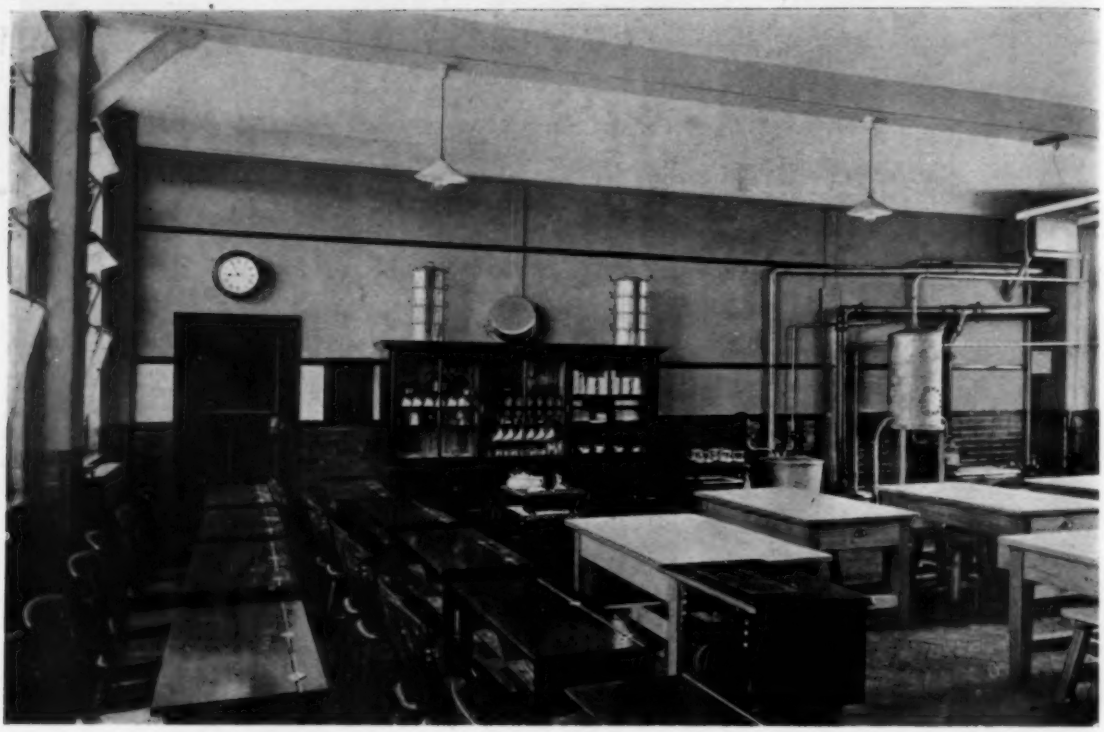


INFANTS' CLASSROOM, LOOKING INTO PLAYGROUND, WITH SCREENS OPEN AND CORRIDOR ADDED TO CLASSROOM.

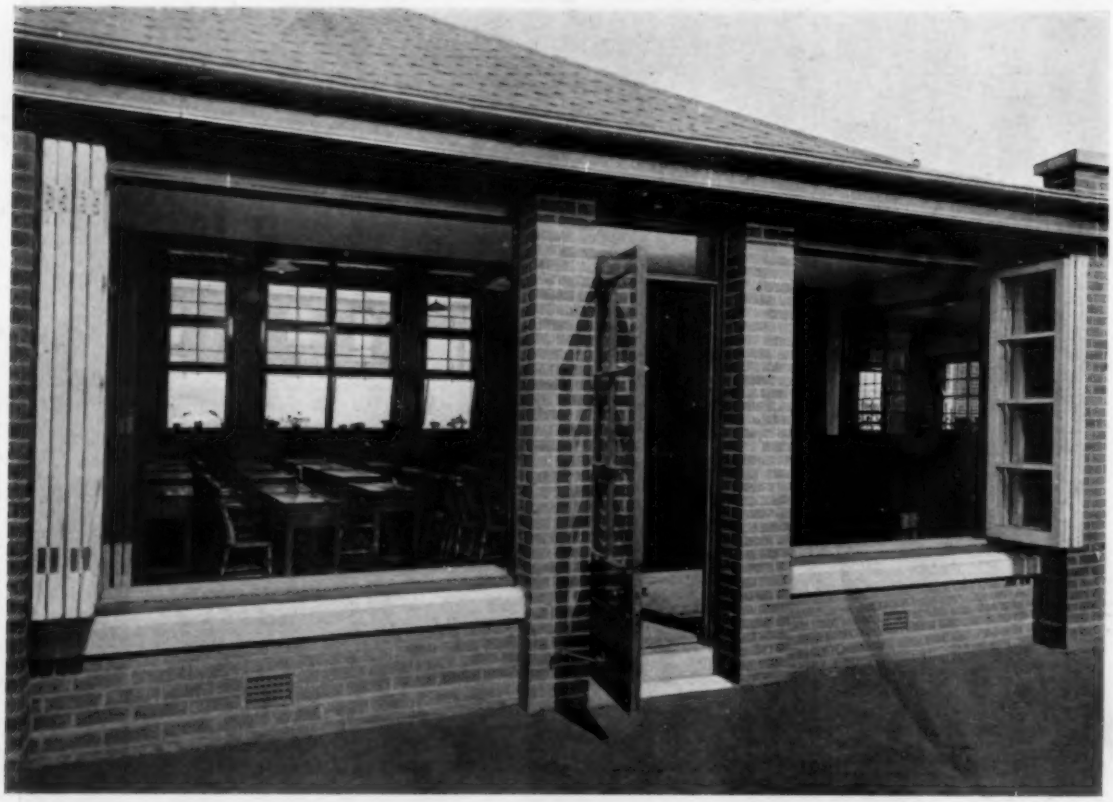
INFANTS' CENTRAL HALL.

Meon Road Elementary School, Portsmouth.

MESSRS. A. E. COGSWELL & SONS, Architects.



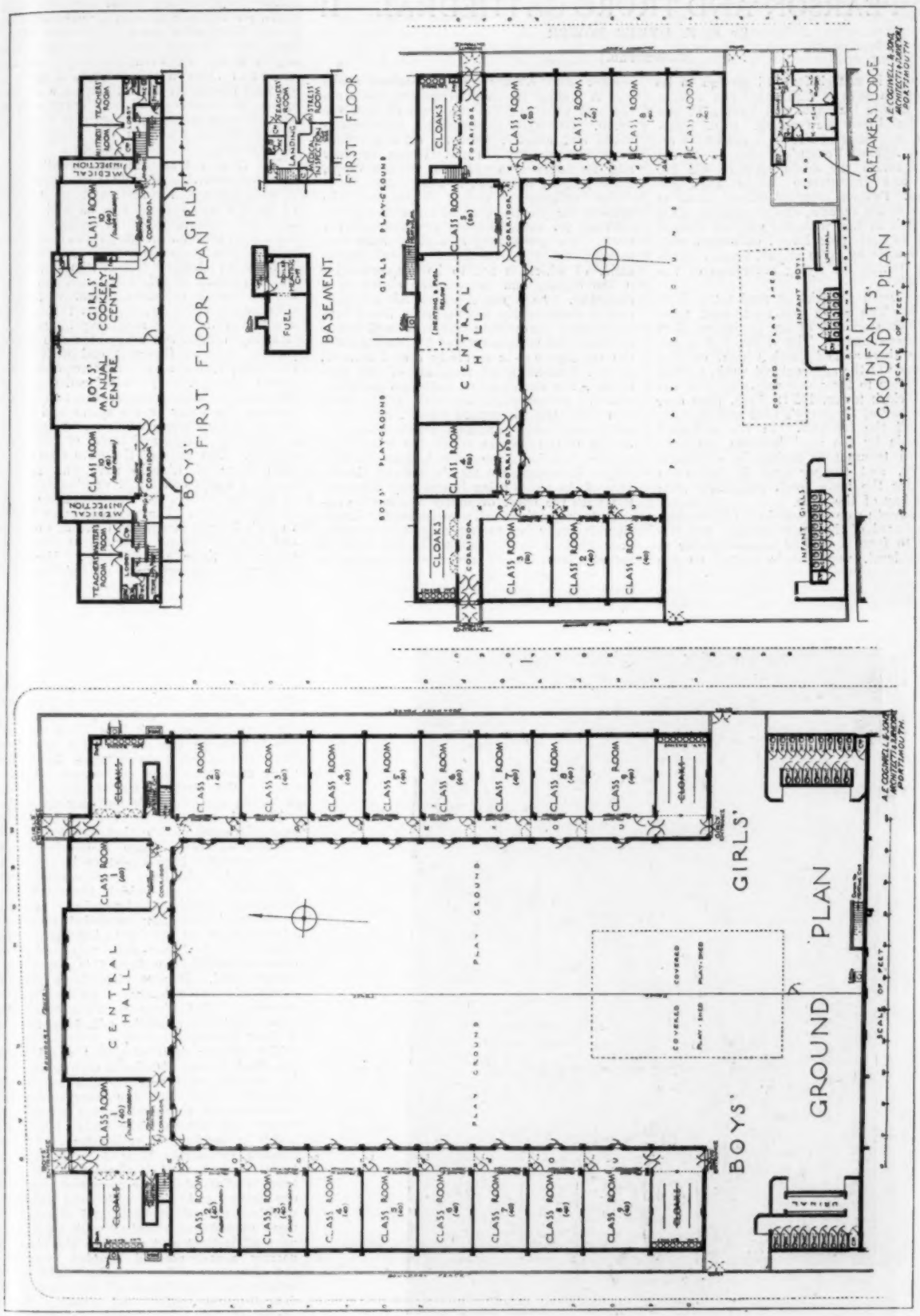
PART OF GIRLS' TECHNICAL ROOM.



VIEW FROM PLAYGROUND, LOOKING INTO ONE CLASSROOM, WITH SLIDING SASH WINDOWS OPEN.

Meon Road Elementary School, Portsmouth.

MESSRS. A. E. COGSWELL & SONS, Architects.



Meon Road Elementary School, Portsmouth.

MESSRS. A. E. COGSWELL & SONS, Architects.

J. L. PEARSON AND TRURO CATHEDRAL—II

BY S. E. DYKES BOWER.

[CONCLUDED.]

THE plan is straightforward enough in its main lines—a nave of eight bays and a choir of five, double transepts and towers at the west end and over the crossing. In its treatment of difficulties of site it is extremely ingenious. Against Benson's wishes it was decided to retain the south aisle of old St. Mary's and incorporate it in the new cathedral. Pearson accepted this condition as the basis of his scheme, and ranged the piers of his choir in line with the piers of the old building so that these latter, connected with the choir aisle by cross arches, became available for taking the flying buttresses of the choir vault.

On the south an existing road set a limit to space. The south and south-west transepts are consequently of less projection than the northern ones. The former has an elaborate three-arched porch which, echoing the richness of the adjacent old work, softens the transition to the austere simplicity of the new. A clock tower, 135 ft. high, rises over the west bay of St. Mary's aisle and skilfully rounds off the junction. In the awkward angle made by the road between the nave and south transept is tucked in a circular baptistery, and further west is just room enough for the main porch projecting from the first bay of the nave.

On the north side the two bays of the choir aisle eastward of the main transept are carried up to form a vaulted organ-chamber at triforium level, very simply treated on the exterior and roofed in one big gable. The transept itself has eastern and western aisles, the eastern giving access to a three-sided cloister with library and song-school above it. A hexagonal chapter-house opens from the east walk and the choir school from the north. The latter is completed; the chapter-house and cloister, awaiting some generous benefactor, are yet to come. Under the choir and its aisles is a spacious vaulted crypt, made possible by a fall in the ground.

The exterior is deeply impressive. In spite of the proximity of an immense railway viaduct, its mass effectually dominates the town. Its great height, soaring lines and multiplicity of parts—the emotional significance of which is not to be despised—give it the dignity and bespeak the status of a cathedral. As a model of superb composition it could hardly be excelled. The subordination of the eastern transepts and organ chamber, the management of St. Mary's aisle, the tacking-on—in carefully casual manner, as Mr. Francis Bond remarks—of the baptistery, are examples of problems perfectly solved. Larger problems, such as the relation of central to western towers, have been not less cleverly handled. Particularly successful is the way in which the main lines of the building have been broken by subsidiary buildings, not merely without the repose of the whole being in any way impaired, but with the effect of subtly altering its apparent proportions. Truro looks far larger than it really is; so imposing is its appearance that it is difficult to realise that in actual dimensions it ranks with Rochester and Southwell. Its unity and harmony, moreover, the result of having been built all at once, the product of a single brain, constitute an advantage which the older cathedrals, for all their fortuitous picturesqueness, lack. They each have their weak spots—some point of view from which their grouping is defective; even Salisbury, the most perfect of them in this respect, is spoilt by its west front. At Truro, there are no weak spots. It composes well from every side and exhibits that studied perfection of form that is only to be found in the highly-finished work of art.

Yet it is not an inhuman building. Its dramatic contrasts of light and shade imbue it with grace and charm, and its colouring of grey Cornish granite walls and Cornish slate roof, brightened by the brilliant green of the copper roof on the campanile, is singularly happy. Everywhere there is inexhaustible fertility of design. The extent indeed to which Pearson exercised his mind in applying to similar objects different and admirably fresh treatments, suggests that he took a pleasure in never repeating himself. Interesting comparison may be made of the porches, that at the west end with that in the south transept; the numerous rose windows; the gables of end-façades and the pinnacles at their corners; the two western towers; the bases of the spires and the details of their dormer windows. Signs of his own special likings and traces of his studies abound. The bays of the nave own affinity with those of Lincoln nave and Beverley choir; the east end is not unmindful of that at Whitby Abbey, the transept-ends of those at Westminster. The west end is an allusion to such French façades as those at Coutances and the Abbaye-aux-Hommes at Caen; the spires to those of Brittany. Everything however is stamped with an indefinable impress of his own; there is variety, but a harmony pervades it. And all through runs the invaluable quality of style. The architecture of Truro has nothing tentative about it; it does not hesitate or languish. On the contrary it is full-blooded, robust, confident. No awkward pauses or flagging inspirations spoil its closely-knit, homogeneous character. Every detail is well considered and purposeful, having some definite contribution to make to the whole. The blind arcading which Pearson has so liberally applied to blank wall-spaces is an example. It is something more than mere enrichment. By sustaining the rhythm and emphasising the scale, it plays its part in unifying the design.

There is apparent in all the detail, moreover, the same virility that distinguishes the big lines of the building. It is crisp, precise and clear-cut. Like a picture in which the lights and darks have been worked up to just that point at which they tell most effectively without becoming insistent, each detail has been modelled up to its utmost capacity without becoming exaggerated. A lesser man using as many elements would have made this exterior look overcrowded. Pearson himself, as has been remarked, was not always guiltless in this respect. But there is no overcrowding here. Nothing could be added or removed without injury.

The interior deserves almost equal praise. Its effect is one of solemn dignity achieved by breadth of treatment and sobriety of character, free from the exaggeration and over-emphasis prevalent in too much more recent architecture. The ratio of height to width is particularly satisfactory. In most English cathedrals it is 2 to 1, inclining to lowness; here it is about 2½ to 1. Contrast is afforded by the nave and choir, the one severe and plain with bold sexpartite vaulting, the other chaste and elegant with more refined quadripartite vaulting. In the nave all is light and open; in the choir the narrow acutely-pointed coupled lancets of the clerestory diffuse a softer light on the sumptuous furnishings of canopied stalls, delicate iron grilles and glowing marble pavement. We see Pearson at his best in this choir, giving full expression to his powers. Its inspiration, to judge by the triforium and other details, came from that one Early English bay at the east end of Durham choir. But the proportions here

Photo: Jordan, Truro.

The Interior, looking East.

NOTE.—Since this photograph was taken the altar has been lowered one step and a low, coloured dorsal erected behind it.

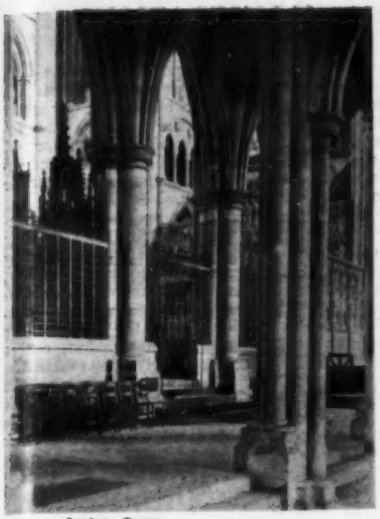


Photo: Jordan, Truro.

View from Second South Choir Aisle.

are quite different; the bays are very narrow, giving an impression of great height, and are lavishly detailed, the vaulting ribs being profusely enriched and the triforium shafts differentiated by the use of varied stones.

The choir attains a fitting climax at its east end, in a row of three great lancets, of grave and majestic simplicity. The design may be compared with that executed by William Perkins at Worcester, some twenty years before, to replace a large and debased Perpendicular window. In a wall almost exactly the same height as at Truro he had to install, instead of a double row of three, a double row of five lancets. Well as he did it, the result is not as at Truro completely successful. The difficulty in each case lay in preserving a sufficient thickness of wall visible both inside and out. At Worcester it is adequate within but inadequate without, where the effect is mean and poor. At Truro the thickness is on the outside, and to counteract the deficiency within, Pearson constructed in front a very narrow vaulted bay, unlighted at the sides and divided from the choir by what is virtually a curtain wall, pierced by three lofty arches framing the windows behind. The windows, seen through a sudden band of darkness, appear more distant and acquire an enhanced dignity.

The west end is also interesting. The space between the two towers is vaulted as an extra bay of the nave, but marked off from it by a lofty arch the full height of the vaulting. A stone gallery fills it at a height of about twenty feet, and over this tall and narrow arches give into the space under the towers at the sides. The presence of this gallery nevertheless is unfortunate; it reduces the apparent length of the nave which would be all the better for another fifteen feet, and it blocks what, if left open, might have been a most imposing entrance bay. Butterfield's rather similar treatment at St. Alban's, Holborn, is more successful. There is no gallery and the arch and its supporting clustered shafts dividing the bay from the nave, are made very prominent. At Truro they seem too flat and lack definition.

For the same reason (the presence of the gallery), the north transept end is inferior to that of the south, where the plainness of the bare walling below admirably sets off the richness of the windows above. Both galleries, however, are in themselves excellent, and no objection equal to that which applies to the west gallery can be brought against that in the north transept.

There are many other interesting points in this interior: the curtain walls in front of the aisle windows in the nave which, with their multiplication of pillars and arches, increase the impression of size; the clever treatment of the south choir aisle and its varying levels—ingenious planning turned to dramatic account; the excellent lighting of the nave and choir on the sound principle of staining the aisle windows and bringing all the light through the clerestory high enough up to avoid any glare to the eye.

It is the charm of colour, however, that is largely responsible for the beauty of this interior. Many different materials have been employed to produce it; the internal ashlar is of St. Stephen's granite, the arcades and vaulting of Bath stone; smaller details, such as the triforium shafts, are varied by the use of yellow Northampton stone, brown Hamhill, slate-blue polyphant and brownish-grey Duporth. The pavement in the nave and transepts is of marble misciato in low tones and forming big shapes; that in the choir an intricate maze of coloured marbles such as Pearson delighted to use, and with which he adorned also the choirs of Peterborough and Bristol cathedrals. Effective use is made of local materials, such as Cornish serpentine in the steps to the choir.

The stained glass throughout the cathedral is in one style, and all* by Clayton and Bell, who had already worked for Pearson in most of his important churches. Though the art of stained glass has undergone a great change since these windows were done and their style is no longer fashionable, they deserve very high praise. As work of their time they are exceedingly good. They maintain an excellent standard of colouring, and in some cases, the rose window of the south transept and the eastern lancets, attain a very high level. The latter, kept deliberately sombre in hue to show up the reredos, may well rank among the best of modern windows.

The reredos and screens on either side are of Bath stone, richly treated with a profusion of sculpture. The reredos itself is especially well conceived, and its position at the crossing of the eastern transepts with a flood of light coming down upon it is ideal, making the uncoloured stone stand out with simple grandeur. It would have been better, however, had the statuary been less thickly applied.

Space will only allow of passing reference to the fine woodwork in the choir, the large amount of beautiful ironwork, the pulpit of polished Hopton Wood stone, the screens to All Saints' Chapel behind the high altar, and the triptych in St. Mary's aisle, both by Mr. F. L. Pearson, Tinworth's "Procession to Calvary" in the north choir aisle, the numerous modern memorials, the exquisite hanging pyx, and the valuable collection of plate. There is much of incidental interest in the older relics—some excellent monuments from the old church, the Renaissance pulpit† and the organ-case in St. Mary's aisle. The latter, a notable piece of work by Byfield, dates from 1750. It was originally intended for the Chapel Royal, but being found unsuitable, was set up here instead.‡

Enough has been said of details. What is the prevailing characteristic of the Cathedral? There can be no doubt about one thing: Truro is genuinely Gothic—genuinely live Gothic, sufficiently conscious of its

*In St. Mary's aisle, the east window is by Mr. Walter Tower. There are some poor mid-Victorian windows in the south wall, but one filled with fragments of old glass.

† This pulpit had a fine sounding-board, which disappeared during the Victorian alterations to old St. Mary's. There is a tradition that it is the work of the father of Henry Bone, the miniature painter, who was born in Truro in 1755.

‡ The cathedral is probably unique in possessing three organs, the noble 4-manual instrument in the triforium of the choir, the last of "Father" Willis's great series of cathedral organs; the 3-manual Byfield, and a 2-manual chamber organ, also by Willis, in the eastern aisle of the north transept.

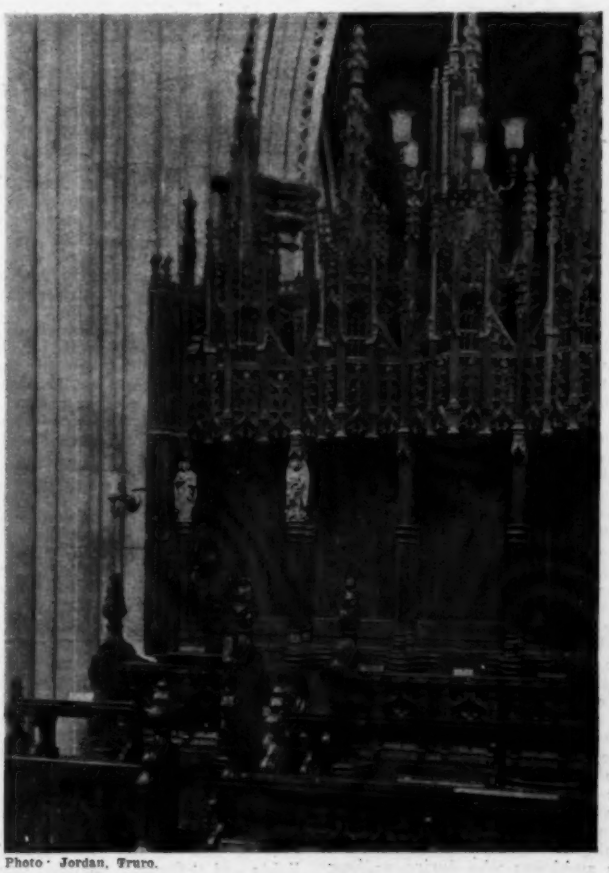


Photo: Jordan, Truro.

Detail of Choir Stalls.

vitality not to indulge in any revolutionary innovations to display it. It did not attempt to break new ground for the simple reason that it felt no need to. Yet through a failure to realise this, much irrelevant criticism has been passed upon it. It is often alleged, for example, that to reproduce in the nineteenth century a plan devised under different conditions seven centuries earlier was, in the nature of things, ridiculous. And certainly the plan of Truro is deeply founded on mediæval tradition; but it is an exceedingly sound one, and works exceedingly well in practice. Such a plan as that of Liverpool, it must be remembered, with its vast central space, unprecedented and, it would hardly be unfair to say, experimental, would have been quite out of the question fifty years ago. No one would have conceived such a thing. Truro is well adapted to diocesan needs as well as those of a town of eleven thousand people. It provides for the daily offices a choir neither too large nor too small, and for greater services a nave seating, perhaps, fifteen hundred, or, if all available space in it and the transepts were utilised, well over two thousand.

Modern opinion and experience seem to confirm this arrangement as the most satisfactory. The Dean of Chester, in his book, "The Nature of a Cathedral," declares that "Immense . . . concourses are not really half as effective as the same number broken up into three or four groups; very little business is done with large crowds. . . . Two thousand is about the limit, if those present are to hear the speaker, even if he is a good speaker with a good voice and some knowledge of how to use it. . . . For processional purposes a great nave is splendid; but if preaching is the principal purpose, it is not really convenient to have too vast a space. Very likely hereafter mechanical contrivances for distributing the human voice in a large building will reach a perfection far ahead of what has been achieved up to date. In any case something, and something not inconsiderable, will be lost of the musical tone and emotional effectiveness of the human voice and human person speaking to a congregation not too large to be addressed without too great vocal effort."

Actually it must be admitted that preaching does not represent the chief element in Catholic worship. What is of great importance is that the plan should provide space for an adequate number of altars, easily accessible but quiet. For this purpose the mediæval plan or some variant of it seems still the best. Truro at present has seven altars and could, if necessary, have more.

There are features of Truro however that, in spite of the plausible air of being necessities of plan, with which Pearson invested them, may more justly incur the charge of conscious mediævalism. There is a marked deflection of axis between nave and choir, which it is difficult not to regret; in the nave the two eastern bays are larger than the others, though so slightly that the difference is hardly noticeable; in the choir one bay is very distinctly larger, and does not improve the effect.

In the choir triforium foliated capitals appear in places, with a haphazard inconsequence that can only claim the charm of the unexpected. The mouldings, too, of the capitals vary in an extraordinary manner throughout the building; though only a practised eye might detect it, scarcely two consecutive pillars are quite identical. To a certain extent they reflect the perceptible change in style which runs through the cathedral from west to east. Anyone familiar with the minutiæ of architectural development between 1175 and 1275 may see that Pearson amused himself by reproducing them in the cathedral on a sort of imaginary supposition that Truro might have been built during those hundred years, and that the architects who during so long a period would have contributed something to the work, left their mark upon it in various little ways. It was the sort of whim that so good a scholar had the right to permit himself—a little sophisticated romanticism that only an age suffering from a morbid repression would forbid.

Too much stress again must not be laid upon such illogicalities as the existence of a triforium passage, which obviously is neither needed nor used. Logic, fortunately perhaps, is not the sole criterion of good architecture, and what seems logical to one generation does not necessarily seem so to the next. It is the historical test that must not be ignored. Has this been done and done well, not as I should like it, but as the author meant it? The architects of the Gothic Revival had their own ideas of what cathedrals should be like, and at Truro Pearson was at liberty to carry them out. It would require a very carping critic to condemn the result on the score of hypothetical objections.

It remains to consider why it is that Truro has received in architectural circles such scant attention. To a certain degree it has been the victim of circumstances; it was born out of due time. As has been remarked, the Revival had already entered upon its decline by 1880, and thirty years later it was anathema. Opinion which was growing cold when Truro was started had become hostile when it was finished, and its completion was received, if not with stony silence, at least with cold neglect. It had, of course, its admirers. Edmund Sedding, whose own work in Cornwall is of a high order, wrote enthusiastically of it, and there were others of sufficient discrimination to estimate its true worth. But on the whole it served only for a melancholy sacrifice to the tyranny of professional fashion. Lay critics were more appreciative, but even here it was not so much the nobility of the actual architecture that was applauded as such minor matters as the details of the statuary. And that is precisely the quarter in which mediæval craftsmanship makes the best modern work look poor.

The real significance of Truro is something very different. Firstly, it embodies perhaps better than any other single building the highest aspirations of ecclesiastical architecture as understood and practised during the Victorian era. Secondly, it came at a time when the Gothic fervour was still hot, but hot from the refining fire that its own intensity had kindled; when the wisdom of experience was far enough removed from the zest for it to make possible temperate and fastidious judgment; when maturity was able to impart to the fruits of earlier experiment a serene and polished finality. It is a sort of emotion recollected in tranquillity, representing with the fragrance of the distilled product the quintessence of the Revival. It may not, perhaps, set the seal on every expression of the restless energy of its age; but scholarship, masterly technique, nobility of ideal, conviction, sincerity—all these it sums up to perfection.

It is easy nowadays to dismiss with careless superiority the convictions of the Victorian Gothic school as hopelessly narrow and mistaken. They may have been; but a cynicism that prides itself on its broad-mindedness is too often the last refuge of the destitute. Conviction at least carried certain advantages with it. The Gothic Revivalists were never in doubt as to their goal. With no disturbing issues to distract them, they were able to go forward with a perfect concentration on the real thing as they saw it. Because of this, their best work, in spite of faults, was honest, positive and forceful. In Truro Cathedral we see the measure of its possibilities—consummate artistry and a singleness of purpose that together are irresistible.

[Truro Cathedral has lately been illuminated by electricity by the General Electric Co. A view of the nave lighted by floodlights and "Osram" gasfilled lamps is given on page 176.]

ILLUSTRATIONS.

(*Continued from page* 154.)

would, by opening one part against the wall and one part with the door in it across the corridor, add the portion of the corridor crossing each classroom to the interior, thus enlarging it by the area of the corridor or, as it were, making the classroom an expanding room—larger in summer and smaller communication in winter.

This arrangement now proves to be satisfactory, and the fresh-air principle is fully maintained, as the end of the rooms away from the corridor are practically all window, opening as hopper lights below and pivot-hung lights in the upper parts, while the outside of the corridor next the playgrounds consists of Kingfisher sliding sashes, and a door which, when open, gives a practically open end to both sides of the classroom. In the event of the screens being closed, as it is suggested they should be in winter, there are clerestory windows above the flat roofs of the corridors, which still maintain a through ventilation.

The site was very favourable, as it consisted of a large oblong running due north and south, with roads on three sides, and, as will be seen, the buildings are arranged in the form of three sides of a square, with playgrounds in the centres, and central halls forming the side on the north connecting the east and west sides of the squares. The classrooms on the east and west sides receive the sun during both the morning and afternoon, while the playgrounds in the centre form a sun-pocket, being open on the south and closed on the north.

The heating is by low-pressure hot-water. The teachers' rooms, with adequate internal sanitary arrangements, are on the first floor over the cloakrooms, and there are elementary science classrooms and technical rooms arranged above the central hall, and a medical inspection room to each department.

The school is built in good permanent construction, but, with a view to economy, with 11 in. hollow walls with buttresses at each classroom division. Division walls are 4½ in. brick with a 9 in. pier in centre. The two-story buildings are constructed as iron-framed buildings filled in with brickwork: all the brickwork is in cement mortar. The walls are plastered throughout internally, and all rooms, corridors, stairs, etc., have a salt-glazed brick dado 4 ft. high. The roofs over the central hall, corridors, teachers' blocks, etc., are covered with Vulcanite roofing on boards, and all classroom blocks with dark brown asbestos slating on boards and battens; all ceilings are plastered; floors throughout are of 1¼ in. pitch pine blocks laid herring-bone pattern in bitumen on 6 in. concrete and the first floor over the hall and all staircases are of reinforced concrete 6 in. thick. The playgrounds are covered with a 6 in. brick core and 2½ in. "Tarmac" paving.

The work has been carried out by Mr. Samuel Salter, of Portsmouth, at a cost of about £34,000, which includes work to playgrounds, drainage and sanitary work, fencing all round and street pavings, complete, about £28 per head.

The following firms were selected for the special items named:—

Haynes, of Portsmouth, asbestos roofing; Vulcanite Roofing Co., Vulcanite roofing; Kingfisher, Ltd., West Bromwich, Birmingham, sliding partitions and windows; W. Beutell, Portsmouth, heating, to architects' design, with Lumbys' Steelite boilers and Beeston radiators; Hobbs and Sons, Portsmouth, electric light; Marchetti, Ltd., Portsmouth, wood block floors; David Rowell, Westminster, iron play sheds and iron fencings; Adamzes, sanitary apparatus (pedestal pans to each W.C.), with "Epic" flushing apparatus, etc.; E. C. and J. Keay, Ltd., constructional ironwork; Leeds Fireclay Co., glazed bricks and "Shepwood" block W.C. divisions; Parker, Winder and Achurch, cloakroom fittings and door and window furniture. All paint by Messrs. Gay and Co.

ENGLISH COMMERCIAL BUILDINGS II

BY F. E. BENNETT, A.R.I.B.A.

The Manufactory (*continued*).

THE design of the factory building involves problems more of science than of art, but what problems of art there are the architect must handle on his own initiative, and then perhaps with little direct appreciation of his efforts. In the middle of the nineteenth century and for the many years succeeding, when factory buildings had not reached an important status, exterior design took the form of simple domestic work or in the case of large factories the good old classical units were applied in the good old way to provide something a little more dignified. The time came, however, when the standard method of design would no longer do. For one thing the use of material was making it logically unreasonable and, for another, the buildings were getting too large to take the usual motives without producing monotonous repetition. The result seems to have been that everybody gave up the idea that a factory could be anything but a monstrosity, and new owners decided not to waste a penny on trying to make it look like anything else.

This state of affairs, fortunately, is now changing. The consciousness of surroundings has become more acute and with the increased pleasure travelling into all parts of the country popular indignation at the offence of an ugly factory building dumped down without regard for the beauty of surroundings is beginning to express itself. All factories are not ugly, and many at least have the merit of striving to give a pleasant appearance despite difficulties. Many efforts have been made in recent years to arrive at an exterior design which will be at once logical—expressing the purpose of the building—and at the same time introducing some pleasantries in the form of modelling or superficial decoration.

With the tentative use of new materials, much attention has been absorbed by structural questions and by efforts to create forms which will facilitate newer and more varied manufacture, and the effect has undoubtedly been to divert interest from the less practical question of exterior design. Structures compounded of different materials—in parts of steel, concrete, cast-iron, brick and wood—have not made the problem of suitable expression easy for the designer. Now, however, that the knowledge of the new materials has become more certain, simplification in the one building brings out the possibilities of suitable design expression with more clearness. With the increasing use of reinforced concrete these possibilities are developing rapidly. Designs are being put into material form which lead the way towards character and convention in treatment, a treatment which may eventually be recognised as having the full status of a conscious style of architecture.

The U.S. Army Supply Base, unfortunately not an English building, but situated near New York, and the work of Cass Gilbert, still remains one of the finest designs for the factory type of building. The architect himself says of it "there is something very fine about the big grey mass of a building, all one colour, all for an apparently compound structure and one tone, yet modified by the sunlight or shadow to pearly grey of wonderful delicacy. It is the big simplicity that counts, and if there may be projections for fire towers or lift shafts or other salients and if the glass surface may be kept in scale, there may be silhouette and light and shade and shadow and reflected light that will make a picture. . . ."

The drawing of the Japanese factory (illustrated in the previous article) showed a very interesting treatment of the one-story north-light structure built in concrete. A criticism may be that the heavy "flying" beams obscure some of the daylight, but their arrangement gives a form to the interior which is pleasantly regular and most satisfying in its firmness.

The diagram of the elevation to the Wallace Scott building by Sir John Burnet, Son and Dick shows a straight example of a treatment illustrates in an unusually good way how an appearance of stability can be gained, although the voids are as great as the solids.

Of modern industrial work abroad, particularly in Holland and Germany, a good deal has been illustrated lately, but it is doubtful if much of it can be of use in determining our English development. Bricks are handled with much cunning, and reinforced concrete is made to take on strange forms which the normal mind finds difficult to enjoy.

The structure which may have in it more suggestion of the future than any other is that composed on the outside of glass and steel entirely. It seems to convey a feeling of delicacy which is in proper relationship to the thinness of the steel framework which holds it together. And what a marvellous supply of daylight it gives—a supply to fill the owner with joy.

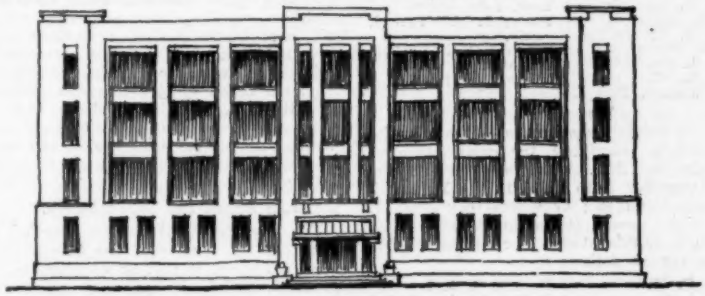


Diagram Elevation of the Wallace Scott Premises.

SIR JOHN BURNET, SON & DICK, Architects.

Portion of the U.S. Army Supply Base.

MR. CASS GILBERT, Architect.

EXHIBITION NOTES

THE PASTEL SOCIETY.

We do not think that the art of pastel drawing has advanced so much as it ought, considering the quite distinguished work of a few artists, which should give inspiration and guidance. There are some very well-executed drawings in the present exhibition, which fail to express the special qualities of pastel, although they are quite pleasing pictures.

The Pastel Society's thirteenth exhibition is admirably displayed, the subjects being hung in distinct groups by the various artists. The principal place in the large gallery is a group of six subjects (274-9), by H. Davis Richter, which make a telling record of his power and versatility. The Great North Road (276) is a striking picture of the Dorman, Long and Co.'s fine bridge at Sunderland, lately opened. The six landscapes by Miss Mary Yates are good pastel work.

W. Redworth's work is always attractive, and his six drawings are amongst the best in the exhibition. Leonard Richmond continues to develop his art, and his view of Mountain in the Italian Tyrol (123) has a strong decorative effect. The dainty drawings by Ll. T. Menzies-Jones (128-133) have a fresh and distinctive charm. Amongst other subjects is a specially pleasing one of the Mermaid Inn, Rye (4), by Joseph Pike. A delightful sketch of a head by R. J. Eves (41) should not be overlooked.

Mr. Littlejohns is well represented by six vivid landscapes. One of the best things Leonard Richmond has done is a fine drawing of the Dolomites (228) in sober grey tones. J. R. Popham has six good pictures, one of Fishing Boats (230) being especially good. A brilliant little piece is Marseilles, by Terrick Williams. The "Study" (206), by Melton Fisher, is a beautifully executed portrait, though it does not quite convincingly suggest pastel. A telling architectural subject is the interior of the Signet Library, Edinburgh (191), by Patrick W. Adam. A very pleasing colour effect is a town view in "Winter," by A. Van Anrooy (307).

SOCIETIES AND INSTITUTIONS

R.I.B.A.

The Examinations, December, 1928.

The Final Examination.—The Final Examination qualifying for candidature as Associate R.I.B.A. was held in London and Edinburgh from December 5 to 13. Of the 60 candidates examined (five of whom took Part I. only), 26 passed (four in Part I. only), and 34 were relegated. The successful candidates are as follows :—

Alexander, A. G.
Ayerst, C. T.
Barnard, A. B.
Brown, R. N.
Cadman, H. G.
Carr, F. H.
Carr, Terence
Cartwright, T. N.
Coleman, J. J.
Daniel, T. M. (Distinction in Thesis).
Howes, J. F. (Distinction in Thesis).
Hunte, L. Le.
Johns, B. W.
Lamb, William. Part I. only.
Law, O. W. M.
Manderson, F. K.
Thewlis, E. C.
Trouton, A. M. O. Part I. only.
Usher, Wilfred.
Vine, C. M.
Walton, D. G.
Watson, Walter.
Watt, John.
White, E. J. Part I. only.
Williams, Siriol. Part I. only.
Winbush, H. S.

The Special Examination.—The Special Examination qualifying for candidature as Associate R.I.B.A. was held in London from December 5 to 11. Of the 18 candidates examined (six of whom took Part I. only), eight passed (three in Part I. only), and ten were relegated. The successful candidates are as follows :—

Banks, P. H.
Brown, J. S.
Edwards, A. S.
Kidd, H. D.
Knight, G. W. Part I. only.
Morant, C. A. L.
Morris, W. A. Part I. only.
Peel, Arthur. Part I. only.

The Examination in Professional Practice for Students of Schools of Architecture recognised for exemption from the R.I.B.A. Final Examination was held in London and Edinburgh on December 11 and 13. Of the 27 candidates examined 15 passed and 12 were relegated. The successful candidates are as follows :—

Breakwell, John.
Brewster, C. C.
Butling, G. A.
Carter, F. R.
Cochrane, J. B.
Hall, Douglas.
Hamilton, A. O.
Harrison, G. S.
Hirst, William.
Mitchell, Thomas.
Ritchie, J. A.
Solomon, D. B.
Wailes, P. A.
Wall, M. L. J.
Whittingham, A. B.

The Special Examination in Design for former Members of the Society of Architects was held in London from December 5 to 10. One candidate was examined and was relegated.

The Special Examination for former Candidates of the Society of Architects was held in London from December 5 to 13. One candidate was examined and was relegated.

R.I.B.A. Premises.

On the written requisition of twenty subscribing members under the provisions of By-law 67, the Council have called a special general meeting to take place on Friday, January 25, at 8.0 p.m.

Mr. Alan Munby, F.R.I.B.A., has given notice that he will move the following resolutions :—

(1) That the Council through its Premises Committee be requested to report to the General Body upon the negotiations for a new site for the Institute premises.

(2) That the Council be empowered to instruct the Premises Committee to obtain the first refusal in such manner as they may think fit of any site or building which they may consider desirable, and if necessary to pay for an option therefor.

(3) That the Council be empowered to instruct the Premises Committee to accept such offer for the Institute premises in Conduit-street, subject to the progress of negotiations for a new site, as the Premises Committee may think fit.

(4) Any other resolutions relevant to the above matters which may appear desirable.

Proposed Tour to the United States and Canada.

Arrangements have now been completed for a party of members of the Institute and Allied Societies to make a short trip to the United States and Canada in July next. The party will sail from Liverpool for New York by the Cunard liner "Laconia," on July 13, and will return from Quebec by the "Ascania" on August 3, arriving in Plymouth August 10, and London on August 11. The places visited on the other side will include :—New York, Washington, Detroit, Niagara Falls, Toronto, Montreal, Quebec, the trip from Toronto to Montreal being made by steamer down the River St. Lawrence, passing the Thousand Islands *en route*.

The cost of the trip will be approximately £95, this figure including cabin class accommodation on the above-mentioned steamers, rail fares in the U.S.A. and Canada, hotel accommodation (exclusive of meals ashore), sight-seeing trips, etc., and it is believed the trip will prove most attractive. The secretary R.I.B.A. will be glad to hear from those members who are interested and to forward a detailed itinerary of the tour on request. Relatives and friends of members will be welcomed.

R.I.B.A. Prizes and Studentships.

The Tite Prize.—Attention is called to the fact that the winner of the Tite Prize, Mr. Wm. Crabtree, is not, as was implied in the previous official announcement, a past student of the Liverpool University School of Architecture working in New York. He is a present student working now in the Liverpool University School of Architecture.

The R.I.B.A. (Alfred Bossom) Travelling Studentship, Silver Medal.—Attention is also called to the fact that Mr. Johnson Blackett, A.R.I.B.A., of Newport, Monmouthshire, to whom a silver medal was awarded, was a student of the Liverpool University School of Architecture.

COLLEGE OF ESTATE MANAGEMENT.

Mr. F. Howkins lectured at the College of Estate Management, Lincoln's Inn Fields, W.C.2, on Tuesday, January 8, on the subject of "Building Estates." The lecturer confined his remarks, more or less, to an estate in course of development at Edgware with which he was closely connected. Generalising, he compared the development of building estates in districts practically built over with that of those in new districts, such as one or other of the suburbs now being created round London. In the case of areas more or less built upon it was usually quite easy to determine the lay-out of the roads; the kind of property which could be erected and also to gauge, within fairly narrow limits, the kind of demands likely to be made; whereas in pioneer work there was an additional speculative element which rendered the process of development much more risky. The lecturer gave details of the various formalities in connection with the lay-out of the site at Edgware, including the deviation of a footpath, and here it was interesting to note that while the total cost involved was £78 14s., legal charges absorbed £51 15s. of that amount. The entire area of the estate being developed at Edgware was 20 acres, 18½ of which were allocated to residential purposes, the remainder being reserved for shops and business premises, and in connection with the latter the lecturer's ideal was that there should not be more than two floors above such premises. The Hendon R.D.C. allowed the estate to build eight houses to the gross acre. At first semi-detached houses, with or without garages, had been erected; later, detached houses, with garages, if required. The price of the houses varied from £1,150 with a twelve-guinea ground rent, to £1,475 with a fifteen-guinea ground rent. Fifty-two per cent. of the houses were sold freehold; 48 per cent. leasehold; and although each house had space for a garage, only 50 per cent. of the purchasers had them erected. Out of the total number of houses sold, 50 per cent. of the purchasers took advantage of building society mortgages or some other form of financial assistance.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS.

At a meeting of this Institution, held at Caxton Hall, on January 2, Mr. Geo. Wilkinson, M.I.E.E., lecturing on "The Economic Application of Electricity to Low Temperature and Heating Purposes," said it was mainly the excessive cost of electricity supply that stood in the way of its general adoption for low-temperature heating purposes. The lecturer described an economic application of electricity for heating purposes by means of a "change-circuit," which, he said, increased the load factor of electricity-supply stations and so made domestic electric heating a possibility on cost alone. Hot-water systems on the central-heating plan, with coke- and oil-fired boilers combined with cast-iron radiators or wall panels, would doubtless continue for an indefinite time as good practice in many large buildings used for business or other purposes, especially when organised and run under a common administration. This type of installation would, he hoped, gradually wean the British public from their weakness for the open coal fire, which was wasteful of fuel, dirty, heavy on labour, and inimical to a pure, clean atmosphere. Again, gas fires and gas radiators (when ventilated) had a domain of their own, while for short-period heating the ordinary electric fire or radiator possessed features of safety, convenience and economy.

After dealing with cost of supply and modern practical economies, the lecturer said that, from Government returns, and assuming an increase in load factor from 25 per cent. to 75 per cent., it was clear that during the year 1927-28 there were available for heating purposes the enormous total of 19,855,701,260 kilowatt-hours at one-third of a penny. This amount was being increased every day with the growth of the constant voltage supplies. Energy in the form of electricity instead of hard fuel had the enormous advantage in that it could be readily delivered at any point where heat was required; also, the expense of pipe transmission and heavy heat losses of transmission were saved, *i.e.*, small and inexpensive electric lines took the place of large hot-water pipes right up to the position where the heat was actually required. Each floor, and, if necessary, each radiator or panel, might have its separate storage cylinder, which would absorb the constantly varying amount of energy received from the "change-circuits," thus forming a heat reserve to be drawn upon at such times and rates as required to maintain uniform temperature under all weather variations. The absence of combustion and the products of combustion enabled these cylinders to be placed in positions where any radiation loss was usefully employed.

THE RENAISSANCE OF ART IN GERMANY.

In his first lecture of the new term at the Central School of Arts and Crafts, Sir Banister Fletcher, F.S.A., F.R.I.B.A., gave a summary of the architecture of the Renaissance in Germany from A.D. 1500 to the end of the last century. He described the introduction into Germany from France of the new Classical ideas, which were absorbed by degrees and incorporated into the Teutonic ideas of building which survived from the Gothic period. The Reformation of the Church took place at about the same time, Luther and others leading the way, and other changes in the methods of civilisation, such as the introduction of printing and gunpowder, all combined to bring about marked changes in national life, buildings following the general tendency to classic revivalism, intermixed with the Gothic features already familiar in Germany. Heidelberg Castle and other monuments were then described by the aid of lantern views.

TOWN PLANNING INSTITUTE

TOWN-PLANNING CLAUSES AND SCHEMES.

MR. E. WILLIS (President) took the chair on January 10 at Caxton Hall, Westminster, at a special meeting of the Institute for the discussion of a paper by Mr. F. M. Elgood on "The Town-Planning Clauses of the Local Government Bill, 1892, and Problems in Statutory Town Planning Schemes."

Mr. Elgood said the Local Government Bill, 1928, was likely, if passed into law, to have marked effects on town-planning. Although there were but six clauses dealing specifically with the subject, there were other clauses which might have an influence, even though indirectly, on the preparation of schemes. Before examining the town-planning clauses, it would be helpful if they just glance at certain other provisions in the Bill, which it would be seen were really the *fons et origo* of the need for the fresh town-planning legislation. These provisions concerned roads and the highway powers and duties of local authorities. Under the Bill the following roads were transferred to county councils, who would then become the highway authority in respect of them. (1) All roads within the area of rural district councils. (2) All classified roads within the area of urban district councils and non-county boroughs. Rural district councils would therefore cease to be highway authorities altogether and urban district councils and non-county boroughs would only exercise the powers of highway authorities in respect of unclassified roads. All roads, including main roads in respect of which a county council was henceforward the highway authority, would be known as "county" roads. There were, however, conditions provided by the Bill under which both rural and urban district councils might undertake the maintenance of county and other roads, conditions which had essential differences according to the character of the council. The Bill did not mention in this connection non-county boroughs, but it was presumed that they were intended to participate in these rights. Firstly, any urban authority with a population of 20,000 and over might claim to maintain and repair any county road within their district and in that case the road shall vest in the urban district council, but the county council would still be responsible for the costs of maintenance and repair as well as for contributing towards the expenses of any improvement. In the case of other urban and of rural authorities the position was different; the county council might arrange for the delegation to local councils of their functions with respect to maintenance, repair and improvement either of the whole of the unclassified roads or of any or all of the classified roads. Where a local council claimed this delegation, the county council was bound under ordinary circumstances to grant the application for unclassified roads, but it had unfettered discretion in regard to classified roads. In all these cases the local councils acted merely as agents for the county councils, who must approve the work executed and expenditure incurred. County councils were given the powers of the Private Street Works Act, 1892, and of section 150 of the Public Health Act, 1875, as if they were urban authorities, and these powers also might be delegated to rural district councils acting as their agents, but certain concurrent rights would continue to be enjoyed by the latter; these might be considered doubtful pleasures, consisting as they did of the power themselves to expend money which the county council did not think necessary.

This was the merest outline of the details of what could not be considered as other than a huge revolution in highway management. It was a bold venture and was said to be based largely upon the recommendations of the Royal Commission on Local Government. What they were now chiefly concerned with was the effect of these proposals upon the mentality of the rural and smaller urban district councils in regard to town planning. Those who saw little in town planning but the laying down of new roads would feel ready to resign further interest in their schemes, but those who realised that the zoning powers, the amenity clauses and the opportunities for land reservations and control of building were of equal or even of greater importance would not be drawn off by the curtailment of power to exercise sole control over road schemes. There was just one other provision in the Bill which might delay or deter the smaller authorities in their consideration of town-planning, and that is Clause 39, under which alteration of boundaries, unions of districts, the conversion of rural districts into urban districts and vice versa, or the formation of new districts might be undertaken. County councils had to make a review of all districts and before April 1, 1932, submit to the Minister such proposals as they thought desirable upon which, after a local inquiry the Minister might make such order as he thought fit. One could easily imagine that inspectors would have a very busy time for a few years, and it would not be surprising if all the proposals were not disposed of until the time came round for the next periodical review ten years later. In the meantime what about town-planning?

He would pass to the actual town-planning clauses of the Bill, Nos. 33 to 38, and there they would at once see that the principle which was new was the constituting of county councils as town-planning authorities, not as independent authorities, nor even as authorities with concurrent powers, but as co-operating and, in some cases, as co-ordinating authorities. While the importance of vesting county councils with some definite authority in the preparation of regional schemes had long been recognised, and while this point had been adequately dealt with in the Bill, the chief reason for the clauses was not to be found in that fact. The real point obviously was that the Bill made such drastic alterations in the powers and responsibilities of existing highway authorities in favour of the county councils, that town-planning schemes, so far as roads were concerned, would be impossible henceforth without some additional powers being conferred upon the latter.

A very great step in advance and one which ought to facilitate bolder schemes was the new provision that county councils might be made the responsible authority for observing certain of the provisions of the scheme. Apart from liabilities which would naturally fall upon county councils in respect of roads, it ought thus to be possible to make for wider provision for such matters as open spaces, the preservation of woodlands, agricultural belts, river-side walks, view-points and many other amenities which affected a more extended area than that of the district in which they happened to be situate and which was often without sufficient resources to meet the responsibility. The fact that the obligation upon borough and urban district councils with a population of over 20,000 to prepare schemes within a definite limit of time was postponed by the Bill for another ten years should not pass without notice. There was nothing in the Bill which justified this, and as town-planners, and especially those who, in the face of a certain amount of ridicule, pressed hard for provisions of obligatory town-planning to be included in the Act of 1919, they could not but feel they were somewhat let down.

A lengthy discussion followed, in the course of which

Mr. H. T. Chapman (Surveyor, Kent C.C.) paid a tribute to the consultants of the Regional Committee and the local authorities who had promoted town-planning schemes in Kent. With regard to the future he thought it impossible for the local authorities to work except in conjunction with the county councils. It was only by linking the smaller authorities with the larger ones and working with the county council that either regional or town-planning schemes could be carried out. With regard to the reservation of open spaces, he certainly thought if a county council became the town-planning authority it would have to pay the piper to a larger extent than in the past.

Mr. E. R. Abbott (Ruislip, Northwood) expressed the opinion that there were too many local authorities, and if they could get some reasonable amalgamations it would in the end be for the good of town-planning. In Middlesex rural authorities with one exception would cease at the end of the year. The Middlesex C.C. had delegated the repair of the classified roads to the local authorities and it worked well, but, of course, Middlesex differed from many counties in that the urban councils were of fair size and could employ competent officials, which, after all, was the crux of the whole matter. On the whole he thought the Bill would help town-planning.

Sir Wilfrid Sugden, M.P., referred to the statement that the Bill had been passed in Committee without an opportunity being afforded for the moving of amendments and pointed out that there would be further opportunities of doing this. He promised that he would put down any considered amendments on the Paper and see that they were debated. He considered that such questions as health, which was closely involved in the subject of town-planning, must not be left to little groups of parochially ruled councils. He would go farther even than a single county and would group traditional counties, such as Durham and Northumberland, and Lancashire and Yorkshire.

Dr. Raymond Unwin said that, on the whole, he looked with satisfaction to the powers which were going to be given to assist county councils in town-planning. It was true that in some parts the ordinary residents looked on county councils as detached bodies, but they would have to try and make these councils more definitely in touch with local life. The Bill should lead to mutual stimulation on the part of the authorities, and this should mean an extension of town-planning and the carrying out of big open spaces, which minor authorities could not handle with effect owing to lack of power and money.

Mr. Cotton thought it should be made clear that county councils in the future should have power to contribute towards the cost of widening a main road or enforcing a building line on a main road if they were included in a town-planning scheme. The Surrey County Council promoted a private Bill and got this power, but he did not think any other council had obtained these powers.

Dr. Maxwell pointed out the immensity of the new duties proposed to be placed on county councils and expressed doubt as to what would happen in the case of town-planning. He thought at the moment the Institute should continue to encourage the smaller local authorities to go on preparing town-planning schemes.

The President said that an important matter was that of spoil banks, which was serious in the South of England and where mining operations were carried on. It also affected the vallevs of many of the rivers where there were ballast pits.

Mr. Elgood, in reply, said he had no intention of being pessimistic and, indeed, he thought the introduction of the county council into town-planning was likely to have a very valuable effect and extend town-planning.

The Davis Theatre, Croydon.

Mr. J. H. Dunt, F.S.I., of 80, George-street, W.1, was the quantity surveyor for this work, which was illustrated in our issue for January 4.

THE BUILDING TRADE

COMPETITION IN CONTRACTING: II

By W. T. CRESWELL, Barrister-at-Law, Hon. A.R.I.B.A., Associate (late Fellow), Surveyors' Institution.

Invitations to Tender.

Invitations to tender should be framed so as to give clear and sufficient particulars of the work proposed, and so, as far as possible, to prevent anyone responding from incurring any unnecessary expense. An employer does not, in giving such invitations, incur any liability for any expense which a competitor may of his own accord incur in preparing and submitting his tender, because the invitation is merely "an invitation to treat, an offer to negotiate, an offer to receive offers"; that is to say, it is an attempt on the invitor's side to ascertain whether an offer can be obtained from any individual within limits he may quite possibly have fixed prior to giving the invitation; and with a genuine determination that he cannot or will not exceed a fixed expenditure even if it should mean abandoning the enterprise altogether.

It may be, however, that if one particular builder in response to an invitation from the invitor prepares a tender at great expense and the invitor employs any means to prevent it from being considered by those appointed to select the approved tender, it is open to, and the duty of, a jury to award pecuniary compensation to the builder thus ignored (see Chaplin *v.* Hicks (1911), 27 T.L.R. 458).

Interpretation of Documents.

It should be well understood that in construing a contract about which a dispute has arisen, the whole of the documents, together with any other correspondence or agreements, and indeed the whole of what has passed between the parties, must be read and considered together; and parol evidence is admissible to explain the meaning of the terms of any of these factors. Ordinarily, in a building contract, these documents would comprise the invitation to tender, the drawings and specifications, and (when supplied) the bills of quantities. But either the invitation and/or offer may in itself, by the terms of it, create an acceptance of contract; and certain correspondence between the parties may, taken together, contain all the essentials of an agreement, and will then set up a contract just as binding as if a contract had been drawn up in customary and formal phraseology and signed by the parties in the normal way. There must, however, be found somewhere in the mass of documents or correspondence, first, a proposal or offer of specified terms, and secondly, a final acceptance of those terms without qualification and in such manner as implies a consent of both the parties to contract about those proposals. The Court will determine a construction on a letter or series of letters just as finally as one which would be evident in the case of a formal instrument; looking at the *substance* of the documents and at the *intention* of the parties, not at the *form* of the agreement.

In Croshaw *v.* Pritchard & Renwick (1899), 16 T.L.R. 45, Pritchard wrote to Croshaw a letter in the following terms:—"Estimate. Our estimate to carry out the sundry alterations to the above premises according to the drawings and specifications amounts to £1,230." It was held: (1) this was an offer to do the work for £1,230; (2) there was no custom that a letter in such form was not to be treated as an offer and if there was such a custom it was contrary to law; (3) Croshaw having accepted there was a binding contract from which Pritchard could not withdraw.

If it can be shown that a complete contract has in fact been entered into, any subsequent correspondence or negotiations between the parties cannot, except by the consent of both the parties, be used to contradict or vary the intention of the former contract; though it may be used as evidence to show that the contract was not at the time finally concluded. (See Perry *v.* Suffields, Ltd. (1916), 2 Ch. 187.)

Fraudulent Misrepresentation.

An invitor who knowingly makes false or reckless representations in the invitation with intent to induce others to act upon them, or makes such representations in such circumstances that the others may reasonably conclude that he intends them to be acted upon, is liable in damages for fraudulent misrepresentation, even if he has expressly stated that the contractor is to *satisfy himself* as to their accuracy or has himself disclaimed responsibility for the accuracy of such representations. It must, however, be remembered that representations made *innocently* do not constitute grounds for an action for fraud, though they may act to support a defence to an action for specific performance of a contract.

In Derry *v.* Peek (1889), 14 A.C. 337, it was determined that fraud is proved when it is shown that a false representation has been made knowingly, or without belief in its truth, or recklessly, *without caring* whether it be true or false.

Bribery and Corruption.

If the acceptance of a tender is manœuvred by a contractor, by his offering a secret commission or bribe to the employer's architect or agent, it is bribery and corruption; and, under the Prevention of Corruption Act, 1906, both the bribed and the briber are liable for a misdemeanour. Similarly, when a public body is concerned in matters of this kind, the bribed and the briber are proceeded against under the Public Bodies Corrupt Practices Act, 1889, and the Prevention of Corruption Act, 1916. In any case where bribery is proved, the employer can either avoid the contract, or treat it as subsisting; and not only recover the bribe from his architect or agent, but, in addition, he may recover damages from such agent or from the individual who bribed him.

Stresses on Bridges.

The Department of Scientific and Industrial Research is to issue shortly the scientific results of what is described as the most thorough investigation of its kind ever undertaken. This is a report of the Bridge Stress Committee. The committee was appointed in 1923, at the request of the Ministry of Transport, to study the whole question of the stresses in railway bridges, and Sir Alfred Ewing, Principal and Vice-Chancellor of the University of Edinburgh, was its chairman. The committee has now been able, we learn, to work out a number of practical formulas and numerical tables that can be applied by British designers of bridges and locomotives.

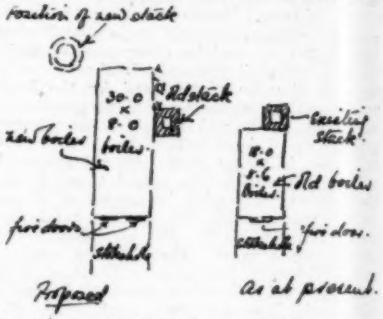
Proposed Registry of Deeds, West Riding.

The West Riding County Council recommend that new offices for the Registration of Deeds should be erected on a site known as the "Gables," Newstead-road, Wakefield, at a cost of £57,658. The sanction of the Ministry of Health is to be sought.

INQUIRY BUREAU

Chimney-stack Problem.

Sir,—It is desired to instal a 30 ft. by 8 ft. Cornish boiler in a factory where the existing boiler is a Lancashire type, 18 ft. by 5 ft. 6 in., with a square stack at opposite end to firebox. The internal dimensions of the stack are 2 ft. by 2 ft.; height of stack above ground, 48 ft. We should be glad if you would tell us whether it would be possible to utilise the existing stack and increase its



height by about 20 ft., or whether a new stack of increased height and internal dimensions is necessary. The sketches given indicate the position of the stack in connection with both boilers. Further, we should appreciate your opinion regarding the advantages and disadvantages of a steel stack in place of the ordinary brick. INQUIRERS.

Condensation.

Sir,—A great deal of inconvenience is being caused in a reinforced building by condensation. The building has a flat roof (reinforced concrete) and is not asphalted. Ventilation through windows and heat from stoves ameliorates the trouble, but the former renders the latter useless from the point of view of heating the room. The water globules of condensation are most marked in the panels or pockets made by the main and secondary beams. I should be glad of any information as to material or general treatment which would satisfactorily cope with this trouble and serve its purpose decoratively. STUDENT.

Removing Paint from a Bath.

Sir,—I have taken over a flat in which the bath, a fine porcelain-enamel one, has been painted over with a heavy oil paint. Can you recommend a method of removing the paint without harming the enamel? FLIP.

Architects in the Army.

Sir,—I should be glad if any of your readers could give me any information concerning the chances an architect would have in the Army. Is it possible for a student of the R.I.B.A. to obtain a commission, through his work, in the Royal Engineers or the Ordnance Survey Corps? JUVEX.

Construction of Dairy Floor.

Sir,—I should be very much obliged if any of your readers could give me a specification for the construction of a floor suitable for a dairy where large numbers of milk churns are handled. These churns are dropped from lorries and rolled along on the lower rim in the usual way. DAIRY.

Safes and Strong Rooms.

[If "Safes" (St. Albans) will send his name and address, his inquiry on this subject will receive attention.]

Garage Roof Design.

[If "Bowstring" will send his name and address his inquiry on this subject will receive attention.]

BUILDING INDUSTRY COUNCIL

Building Industry Council of Inquiry.

A correspondent writes :—

"It is to be hoped that the dangers of trying to effect cheapness in building by using unsatisfactory materials, described in *The Builder* last week, will be taken to heart by every member of the new Council of Inquiry into the Building Industry that was set up on January 10. No doubt those who are responsible for bringing together this Council would not have taken the initiative until they had ascertained on good authority that Mr. Neville Chamberlain was not inclined to establish a departmental committee on building costs, but preferred that the industry should inquire into its own organisation.

"There was a good deal to be said in favour of such a semi-private inquiry, so long as all essential interests are represented, for if this Council fails to achieve much in face of the complexities of the problems to be solved, it is always possible for the R.I.B.A. to take up the matter officially. The present Council is representative, although some may think that some additions of those who could render good service might well be made. The man who has taken an enthusiastic interest in the matter is, I hear, Sir William Mackenzie, who came back from Canada and the United States in 1927 convinced that we in this country had a great deal to learn with regard to building organisation, management, and methods. He is the President of the new Council.

"The R.I.B.A. has selected as its official delegates two architects who have made a very careful study of many of the questions involved. These are Mr. Welch and Mr. Alfred Bossom, who becomes the chairman of the Executive Committee. Sir Walker Smith, Mr. B. S. Townroe, the newly elected hon. secretary, and Mr. H. B. Bryant, the Secretary of the Council, are all old colleagues at the Ministry of Health, and will no doubt each contribute their own particular knowledge to the deliberations of the Council.

"Mr. Johnson, of the Leeds Fireclay Co., will speak with exceptional knowledge of materials, as for years past he has been one of the most active members of the Builders' Materials Association. Mr. Howard Robertson is not only principal of the Architectural Association School, but gives a good deal of his leisure time to the study of conditions in the States and on the Continent. Mr. Barron and Mr. Coppock speak with authority for the operatives, and have a shrewd and practical knowledge of conditions which should prove to be most valuable to the Council. Mr. Cunningham, of Messrs. William Arrol, is, of course, an expert on steel, whilst Sir Tudor Walters, who attended the first meeting and was elected a Vice-President, not only knows Whitehall from inside, but has built 12,000 houses for colliery proprietors during the past two years, and is now building another 12,000 for Imperial Chemical Industries. Mr. Hugh Davies, of the Board of Education, is the acknowledged authority on building education, while Mr. Barnett and Mr. Zaiman, who were present on behalf of the Building Research Board, bring skilled minds from the point of view of building science. The R.I.B.A. is fully represented by Mr. Walter Tapper becoming Vice-President, while Mr. George Burt, who is to be the president of the International Building Congress next year, was able to speak for building trade employers.

"The terms of reference of the Council are so wide that almost every aspect of the building industry can be investigated. I am told that the object is not in any way to restrict the inquiry. The Council gave power to the Committee to co-opt further members, and every person in any way interested who can supply any data likely to be of value on the problem is advised to write to Mr. H. B. Bryant, at the Royal Society of Arts, Adelphi, W.C.2."

IMPROVEMENT SCHEMES UNDER THE HOUSING ACT

A CASE is reported in the *Times* of December 19, Rex *v.* Minister of Health, *ex parte* Davis, which raised an important question under the Housing Act, 1925, in reference to improvement schemes. The scheme provided for the compulsory acquisition of lands by the County Borough of Derby, and proceeded : "After obtaining possession of the lands included in the area, the Council shall, except so far as the Minister may otherwise direct, cause all the buildings to be demolished and the sites to be cleared." Up to that point the Court indicated that there was nothing wrong with the scheme, but it continued : "The whole of the cleared area shall be sold, leased, or otherwise disposed of as the Council may think fit, or may be appropriated or used by the Corporation for any purpose approved by the Minister of Health, provided that on any such appropriation or user the value of the land appropriated, or a proper payment, as the case may be, in respect of the use of the land, shall be credited towards the cost of the scheme. If the Minister of Health so requires, the Council will provide a number of dwellings, not exceeding 72, suitable for the accommodation of persons of the working classes on a site either within or without the limits of the area, according to a scheme to be approved by the Minister." The proceedings took the form of a writ of prohibition calling upon the Minister of Health to show cause why he should not be prohibited from proceeding further in an order confirming the scheme, and a rule *nisi* had been obtained.

The objection to the scheme was that it was too vague and that the Council was seeking to acquire the lands not for the rearrangement and reconstruction of the streets and houses but for the purpose of selling the land as and when it thought fit. The Court appear to have held that the Housing Act contained no power under which the Council could claim such a general authority. It was suggested to the Court that such a power was latent in the Act, and sections 38 (4) and 46 (1) were referred to, but the Court indicated that had Parliament intended to confer such a power it would have been expressed in unambiguous terms. It also appears to have been argued that the Minister had power to confirm the scheme and that, in fact, he never had confirmed a scheme without adding a proviso that no sale or lease should take place without his approval; but the Court pointed out that the Minister has the power to confirm the scheme with or without modification, and if he believed himself to have the power to sanction such a scheme as this he might do so without modification. The Court observed that there was, under section 42 (2), an authority conferred upon the local authority to let or sell the area when cleared, but that was an authority limited and restricted to a particular purpose. It appears, also, to have been contended that the 72 houses mentioned in the scheme, if erected, would leave but little of the area for any other purpose, but the Court pointed out that that provision was qualified by the words "if the Minister so requires," and he might abstain from making such a requirement.

Thus the scheme was held too vague, and on the authority of Rex *v.* Electricity Commissioners (1924, 1 K.B. 171) it was held to be a case for prohibition, as the matter had reached the last stage but one, and if, once approved by the Minister, the scheme would have the effect of an Act, then there would be no remedy and no redress. It had also been urged against the scheme that in this vague form it would prejudice persons affected in any steps they might require to take to meet it or oppose it.

We must reserve any comments on the case or any further explanation until it is fully reported, but it would appear that under section 35 the scheme must provide "for the rearrangement and reconstruction of the streets and houses within the area, or of some of such streets and houses," and that the other provisions relied upon, as stated above, only apply to a properly defined scheme. Thus, under section 38 (4), where persons of the working classes are displaced by a scheme, the local authority, if the Minister so requires, must provide for their accommodation, but it is not obligatory on the local authority so to frame their scheme. It appears that in this case the local authority were relying upon this provision for the purpose of showing that there was some limitation to their scheme, and it is in this connection that the Court pointed out it might never be brought into operation.

Having regard to the complication of the legislation and the brief nature of the report, we only make these latter observations on our own responsibility, but we shall deal with the case at length when it is further reported.

NEW CINEMAS

Becontree.—Mr. John Kay, cinema proprietor, 167, Oxford-street, W.1, has decided to build a picture theatre on the L.C.C. Housing Estate, to cost about £45,000. The architects are Messrs. Lewis Solomon & Son, 21, Hart-street, Bloomsbury, W.C.1.

Dover.—Mr. Cecil Masey, L.R.I.B.A., Devereux-court, W.C.2, is architect for this cinema, detailed in our last issue, to be erected for the Dover Cinema Syndicate, Sloane-square, S.W.1.

East Molesey.—A proposal is under consideration for the erection of a large picture theatre on the site of Tudor Lodge in Bridge-road. The solicitors to the promoters are Messrs. Harris, Cheetham & Cohen, 6, Stratford-place, Oxford-street, W.1.

Harpenden.—The local scheme—given in our issue for November 23, 1928—headed by Capt. Webb, of the Victoria Theatre, which aims at the erection of a new picture theatre in Leyton-road to seat nearly 1,000 persons, has had plans prepared by Messrs. Mence & Ross, 11, St. Peter's-street, St. Albans.

Inverness.—Mr. John Fairweather, 182, Trongate, Glasgow, in association with Messrs. Carruthers, Ballantyne & Taylor, 28, Queen's-gate, Inverness, is architect for the Playhouse cinema, details of which were given in our issue for December 28.

Liverpool.—The £23,000 contract for the erection of a new super-cinema in Overton-street, Edge Hill, to seat 1,600, has been awarded to J. A. Milestone & Sons, Ltd., of Wallasey. The architect is Mr. A. E. Shennan, F.R.I.B.A., 14, North John-street, Liverpool. The scheme was announced in our issue for September 14, 1928.

Lytham.—Messrs. F. Matcham & Co., 21, Beak-street, W.1, and Mr. F. Harrison, F.R.I.B.A., 17, Agnew-street, Lytham, are joint architects for the proposed 1,500-capacity cinema in Lytham, for the Blackpool Tower Co., Ltd. The scheme was given in our issue for August 17, 1928.

Paignton.—A site in the Torquay-Paignton road at Preston has been bought by a local syndicate for the erection of a 2,000-capacity cinema, café, and car park. It will be of the atmospheric type, and it is possible that a competition may be held with a view to fixing upon an architect.

Richmond, Surrey.—Messrs. Leathart & Granger, FF.R.I.B.A., 7, John-street, Adelphi, W.C.2, have prepared plans for a super-cinema at the corner of Hill-street and Ormond-road for Joseph Mears, Ltd., who will themselves start building operations shortly. The scheme includes a block of flats. The cinema will seat 2,000.

Streatham.—Mr. J. Stanley Beard, F.R.I.B.A., 101, Baker-street, W., has in hand the reconstruction of two cinemas at Streatham, the "Empire" in the High-road and the "Golden Dome," also in the High-road. Contracts have not yet been placed.

NEW BUILDINGS IN LONDON

Acton.—RESTORATION.—A faculty has been granted for the carrying out of the restoration of the Church of the Holy Trinity.

Beak-street.—REBUILDING.—Messrs. Townsends (Builders), Ltd., of Dean-street, W.1, are rebuilding 35, Beak-street, Regent-street, W.1, to the plans of Messrs. Yates, Cook and Darbyshire, architects, 43, Great Marlborough-street, W.1.

Bermondsey.—EXTENSIONS.—A site has been obtained by the Borough Council for the extension of the laundry in Jacob-street, Dockhead.

Bishopsgate.—PREMISES.—The buildings at Nos. 57-63 are being demolished by Messrs. W. Marshall, Ltd., Nungate, Peckham, S.E., preparatory to the erection of a large block of office premises. The architects are Messrs. Joseph, 2, Paul's Bakehouse-court, Godliman-street, E.C.4.

Clapham Junction.—BUILDING.—A contract has been placed with Messrs. Bovis (1928), Ltd., 43, Upper Berkeley-street, W.1, at approximately £14,000 for the erection of new branch showrooms for Messrs. Marks and Spencer, Ltd., Chiswell-street, E.C. The plans have been prepared by Mr. William A. Lewis, A.R.I.B.A., 11-12, Finsbury-square, E.C.2.

Deptford.—REBUILDING.—Messrs. Truman, Hanbury, Buxton and Co., Ltd., of Spitalfields, E.1, are to rebuild the "Montague Arms" public-house, Queens-road, Deptford.

Ditton Hill.—REBUILDING.—The "Plough and Harrow" public-house is to be rebuilt by the owners, Messrs. Hodgson's Kingston Brewery, Ltd. The contract has been placed with Messrs. W. H. Gaze and Son, Ltd., High-street, Kingston-on-Thames. The plans have been prepared by Messrs. Yetts, Sturdy and Usher, 34, Gordon-square, W.C.1.

Downham. — LIBRARY. — The Lewisham Borough Council are negotiating with the London County Council for the acquisition of a site on the Downham housing estate, for the erection of a public library.

East Ham.—BUILDING.—A new factory is to be built in High-street South for Messrs. Burgoyne, Burbidges & Co., Ltd., chemists.

East Ham.—HALL.—On a site at the corner of High-street South and Norman-road a new church hall is to be erected. The application has been submitted to the East Ham Council by Mr. W. Wilkinson.

Finchley.—HALL.—Messrs. Yates, Cook and Darbyshire, architects, 43, Great Marlborough-street, W.1, have placed a contract with Messrs. Mattock Bros., of Winkfield-road, N.22, for the erection of a dance hall in Great North-road, Finchley.

Finsbury.—PREMISES.—New warehouse and office premises are being erected in Sun-street, E.C.2, for Messrs. Gallenkamp and Co., Ltd. The builders are Messrs. Walter Lawrence and Son, Ltd., 31, Son-street, E.C.2. Steelwork is by the Aston Construction Co., Ltd., Eagle Wharf-road, Hoxton, N.1; glazing by the Paragon Glazing Co., 5, Victoria-street, S.W.1; heating by Messrs. Saunders and Taylor, Ltd., 74, Gamage-building, E.C.1. The architects are Messrs. Jenkins and Sons, 171, Lewisham High-street, S.E.4.

Hertford-street.—FLATS.—Plans have been prepared for the erection of a large block of flats in Hertford-street and Shepherd-street, W.1. The architect is Mr. Philip Tilden, 314, Regent-street, W.1.

Jermyn-street. — ADAPTATIONS. — The "Sporting Times" has acquired new premises which are to be adapted as offices, etc. The contractor is Mr. P. G. Houghton, 29, Camberwell New-road, S.E.5.

Kingsway.—ALTERATIONS.—Alterations and improvements are to be carried out to Ingersoll House. The contractors are Messrs. Hall, Beddall and Co., Ltd., Pitfield Wharf, Waterloo-bridge, S.E.1. The plans have been prepared by Messrs. Trehearne and Norman, Windsor-house, Kingsway, W.C.2.

New Barnet.—PREMISES. The Cannon Brewery Co., Ltd., have approved the placing of a contract for the erection of the new "King's Head" public-house at Cats Hill. The builders are Messrs. Henry Brown and Co., Watford. The plans have been prepared by Messrs. William Bradford and Son, 12, Regent-street, S.W.1.

New Oxford-street.—PREMISES.—The contract for the new premises for Messrs. Montague Burton, Ltd., tailors, at the corner of New Oxford-street and Tottenham Court-road, W.C.1, has been placed with Messrs. the Lansdowne Building Co., of Putney, S.W.8. The architect to Messrs. Burton is Mr. Harry Wilson, of Roundhay, Leeds. The demolition of the old premises is now in hand. A full list of tenders for this work will be found on page 185.

Old Ford-road.—REBUILDING.—The "City of Paris" public-house is to be rebuilt for Messrs. Truman, Hanbury, Buxton and Co., Ltd., brewers, Spitalfields, E.1. The builder is Mr. Horace V. Clogg, Vallence Works, 159, Hanbury-street, E.1. The steelwork will be erected by Messrs. Archibald D. Dawnay and Son, Ltd., Battersea, S.W., and the terra-cotta faience by Messrs. Doulton and Co., Ltd., Lambeth, S.E. The architect is Mr. A. E. Sewell, L.R.I.B.A., 91, Brick-lane, E.1. The quantities are by Mr. William Gilbert, L.R.I.B.A., 74, Broad-street-avenue, E.C.2.

Oxford-street.—REBUILDING.—Extensive rebuilding operations are to be put in hand at Nos. 262-266, the showrooms of Messrs. John Lewis, Ltd., drapers. The work will be carried out by Messrs. Peter Jones, Ltd., Sloane-square, W.1, whilst further alterations will be executed by Messrs. Bovis, Ltd., 43, Upper Berkeley-street, W.1. The architects are Messrs. A. E. Hughes and Son, 28, Mortimer-street, W.1.

Park-lane.—BANK.—The Westminster Bank, Ltd., have acquired a portion of the ground floor of Grosvenor House (northern block), which is now being erected to the plans of Messrs. Wimperis, Simpson and Guthrie, FF.R.I.B.A., 61, South Molton-street, W.1, for adaptation and equipment as a branch bank.

Park-lane.—PREMISES.—The Duke of Westminster has ordered the demolition of buildings at the corner of Park-lane and South-street, W.1, preparatory to the erection of new premises. The demolition contractors are Messrs. Willment Bros., Waterloo Bridge, S.E.1.

Putney.—BANK.—The Midland Bank, Ltd., Threadneedle-street, E.C.3, have acquired a site in Putney High-street, S.W.15, for the erection of a new branch bank. The architects are Messrs. Whinney, Son and Austen Hall, 8, Old Jewry, E.C.2.

Regent-street.—SHOWROOMS.—The Western Construction Co., Ltd., 47, Victoria-street, Westminster, S.W.1, have secured the contract for the sub-structure of the new showrooms and offices at 88, Regent-street and Glasshouse-street, W.1, for the Ford Motor Co., Ltd. Messrs. Chas. Heathcote & Sons, architects, Kensington and Manchester.

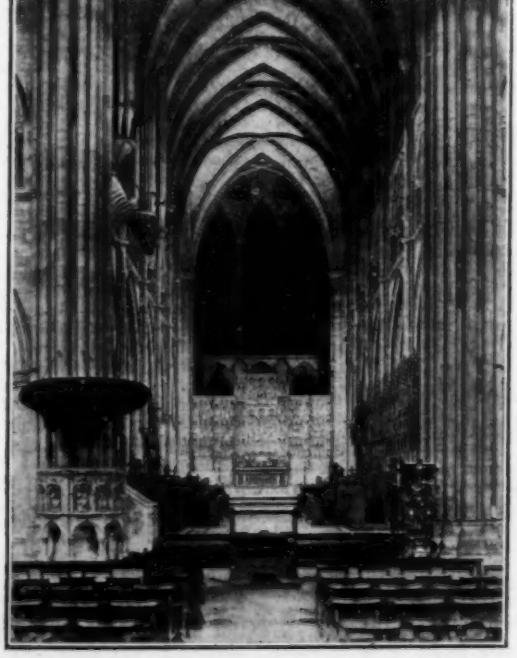
Richmond.—OFFICES.—Plans have been prepared by Messrs. Whinney, Son and Austen Hall, 8, Old Jewry, E.C.2, for the erection of new offices in Manor-road.

Ridgemount-street. — BUILDING. — A new warehouse is to be built at No. 6A for Messrs. Philips Lamps, Ltd. The building will be erected by Mr. Albert Monk, Lower Edmonton, the floors, beams and reinforcement being by the Trussed Concrete Steel Co., Ltd., Cranley-gardens, South Kensington, W. The architects are Messrs. Nicholas and Dixon-Spain, 16, Hanover-square, W.1.

Seymour-place.—SHOPS.—Messrs. Domiciles, Ltd., are erecting a large block of shops and flats in Seymour-place and Upper Dorset-street, W.1. The plans have been prepared by Mr. W. E. Masters, A.R.I.B.A., 124, Baker-street, W.1, and the sub-contractors are the Helical Bar and Engineering Co., Ltd., 82, Victoria-street, S.W.1, reinforcement; Messrs. Girling's Ferro-Concrete Co., Ltd., Leeds, pre-cast concrete; J. Alfred Pratt and Co., Ltd., Wembley, tiling.

Smithfield.—WAREHOUSE.—Messrs. E. A. Roome & Co., Ltd., of Hackney, are erecting a warehouse and bacon stores at 8/10, Hosier-lane, West Smithfield, E.C.1, for Messrs. I. Beer & Sons, Ltd., under the supervision of Messrs. Storrar & Hunt, of Enfield.

Tottenham.—RECONSTRUCTION.—The London Co-operative Society, Ltd., Maryland-road, E.15, have decided to carry out the reconstruction and adaptation of No. 68, Tottenham High-road, N., as a branch stores.



Truro Cathedral: The Nave, illuminated by Floodlights and Gasfilled Lamps. (*See page* 170.)

RATES OF WAGES IN THE BUILDING TRADE

[Every endeavour is made to ensure accuracy but we cannot be responsible for errors.]

	Masons.	Bricklayers.	Carpenters Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Accrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Aldershot	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Alfreton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Alnwick	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Altrincham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ashford Kent	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Ashington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ashton-under-Lyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Aylesbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Aylsham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Banbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Barnsley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barnstaple	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Barrow-in-Furness	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Basingstoke	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Berwick	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bexhill	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Birkenhead	1/10	1/10	1/10	1/11	1/10	1/10	1/9	1/4½
Birmingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bishop Auckland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackburn	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackpool	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bolton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bradford-on-Avon	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Braintree	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Brentwood	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bridgwater	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Bridlington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bromsgrove	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bromyard	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Bungay	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Burnley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Burton-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Buxton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Canterbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Cardiff	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Carlisle	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Chester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chesterfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chorley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cirencester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Clacton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cranbrook	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Cromer	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Darlington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Deal	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Denbigh	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Derby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Devizes	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Dewsbury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Doncaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Dorchester	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Dorking	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Dovercourt	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Driffield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Droitwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
E. Glam. (Mon. Val.)	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Ely	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Exeter	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/5½	1/2
Exmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Fakenham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Felixstowe	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Frome	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Glossop	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Godalming	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Goole	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Gosport	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/0½
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Grimsby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Halifax	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harpenden	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Harrogate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hartlepools	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harwich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hatfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Hednesford	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Hereford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Herne Bay	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Hertford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hitchin	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hoddesdon	1/5	1/5	1/3	1/3	1/3	1/3	1/3	11½
Holt	1/3	1/3	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Huddersfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hull	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hunstanton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Huntingdon	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Isle of Wight	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Keighley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Kettering	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Kidderminster	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
King's Lynn	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leicester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leighton-Buzzard	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Lincoln	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Littlehampton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Liverpool	1/10	1/10	1/10	1/11	1/10	1/10	1/9½	1/4½
Llandudno	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Llanelly	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
London:								
12 m. radius	1/9	1/9	1/9	1/9*	1/9	1/9	1/8	1/4
12-15 m. radius	1/8½	1/8½	1/8½	1/8½*	1/8½	1/8½	1/7½	1/3½
Loughborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Lowestoft	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Luton	1/6	1/6	1/6	1/6	1/7	1/7	1/7	1/2½
Macclesfield	1/7	1/7	1/7	1/7	1/5	1/5	1/5	1/0½
Maidstone	1/5	1/5	1/5	1/6	1/6	1/6	1/6	1/1½
Malvern	1/6	1/6	1/6	1/7½	1/7½	1/7½	1/7½	1/2½
Manchester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Mansfield	1/7½	1/7½	1/7½	1/7½	1/4½	1/4½	1/4½	1/0½
Margate	1/4½	1/4½	1/4½	1/6	1/6	1/6	1/6	1/1½
Market Harb'rough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Matlock	1/6	1/6	1/6	1/6	1/3	1/3	1/3	11½
Melton Constable	1/3	1/3	1/3	1/6½	1/6½	1/6½	1/6½	1/2
Melton Mowbray	1/6½	1/6½	1/7	1/7	1/7	1/7	1/7	1/2½
Merthyr Tydfil	1/7	1/7	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Middlesbrough	1/7½	1/7½	1/6	1/6	1/6	1/6	1/6	1/1½
Newark	1/6	1/6	1/4	1/4	1/4	1/4	1/4	1/2½
Newbury	1/4	1/4	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newcastle-on-Tyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newcastle-ur-Lyme	1/7½	1/7½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
New Forest	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newmarket	1/4½	1/4½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newport, Mon.	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Northampton	1/7	1/7	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Norwich	1/6½	1/6½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Nottingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Nuneaton	1/7½	1/7½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oakham	1/5½	1/5½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oldham	1/7½	1/7½	1/6	1/6	1/6	1/6	1/6	1/1½
Oxford	1/6	1/6	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Paignton	1/6½	1/6½	1/6	1/6	1/6	1/6	1/6	1/1½
Peterborough	1/6	1/6	1/7½	1/7½	1/7½	1/7½	1/6½	1/2½
Plymouth	1/7½	1/7½	1/7	1/7	1/7	1/7	1/7	1/2½
Pontypridd	1/7	1/7	1/7	1/7	1/5½	1/5½	1/5½	1/1½
Portsmouth	1/5½	1/5½	1/5½	1/5½	1/7½	1/7½	1/7½	1/2½
Preston	1/7½	1/7½	1/7½	1/7½	1/4½	1/4½	1/4½	1/0½
Ramsgate	1/4½	1/4½	1/4½	1/4½	1/6	1/6	1/6	1/1½
Reading	1/6	1/6	1/6	1/6	1/7½	1/7½	1/7½	1/2½
Redcar	1/7½	1/7½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Redditch	1/6½	1/6½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Reigate	1/5½	1/5½	1/6	1/6	1/6	1/6	1/6	1/1½
Retford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Ripon	1/6	1/6	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Rochdale	1/7½	1/7½	1/5	1/5	1/5	1/5	1/5	1/0½
Rochester	1/5	1/5	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Rugby	1/7½	1/7½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Saffron Walden	1/3½	1/3½	1/6	1/6	1/6	1/6	1/6	1/1½
St. Albans	1/6	1/6	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
St. Helens	1/7½	1/7½	1/5	1/5	1/5	1/5	1/5	1/0½
Sawbridgeworth	1/5	1/5	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Saxmundham	1/3½	1/3½	1/7	1/7	1/7	1/7	1/7	1/2½
Scarborough	1/7	1/7	1/5	1/5	1/5	1/5	1/5	1/0½
Sevenoaks	1/5	1/5	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Sheffield	1/7½	1/7½	1/6	1/6	1/6	1/6	1/6	1/1½
Shrewsbury	1/6	1/6	1/4	1/4	1/4	1/4	1/4	1/0
Sittingbourne	1/4	1/4	1/6	1/6	1/6	1/6	1/6	1/1½
Southampton	1/6	1/6	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southend-on-Sea	1/6½	1/6½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Southport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
South Shields	1/7½	1/7½	1/5	1/5	1/5	1/5	1/5	1/0½
Stevenage	1/5	1/5	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stockport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stockton-on-Tees	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stoke-on-Trent	1/7½	1/7½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stourbridge	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stourport	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stowmarket	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Stratford-on-Avon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Stroud	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Sunderland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swaffham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Swansea	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swindon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Tamworth	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Taunton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Thetford	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Torquay	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Totnes	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Trowbridge	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Uttoxeter	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wakefield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Walsall	1/7	1/7	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Wallsend	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Warminster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Warrington	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Warwick	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Wells (Norfolk)	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Welwyn Gar. City	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
West Bromwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Weston-sup.-Mare	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Weymouth	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Whitby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Wigan	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Winchester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Windsor	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Wisbech	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Wolverhampton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Woodbridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Worksop	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Worthing	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Wrexham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Wroxham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Wymondham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
York								

* The rate recognised by the National Association of Plasterers, Granolithic and Cement Workers, is 1/9½ plus travelling expenses, equalling 2/– a day and 1/– for Saturdays, whether employed in shop or on job—day or night work.

For rates of wages in the Building Trade in Scotland, see page 186.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; County Architect, C.A.; Surveyor, S.; Engineer, E.; Borough Architect, B.A.: Architect, A.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

JANUARY 20.

***Hunstanton.**—Cinema.—Erection of a new cinema at Hunstanton. Allfatt & Courtney, Architects and Surveyors, Hill House, Tuesday Market-place, King's Lynn. Dep. £2 2s.

JANUARY 21.

Ash.—Houses.—Pair of houses at Ash, near Canterbury, for Kent C.C. C.A., 86, Week-st., Maidstone. Dep. £2 2s.

Bargoed.—Painting.—Interior, at Workmen's Institute, for Committee. W. Williams, secretary, Workmen's Institute, Cardiff-rd.

Birmingham.—Additions.—Also alterations to boiler house at Winson-green mental hospital, for T.C. H. H. Humphries, City E. and S. Dep. £1 1s.

Brentwood.—Wiring.—Of Brentwood Mental hospital, comprising three large blocks and sundry houses and buildings, in screwed steel conduit, complete with fuseboards, etc., for Essex C.C. Couzens & Brown, 9, Old Queen-st., Westminster, S.W.1. Dep. £5 5s.

Cardiff.—Extension.—Minister's hut at Llandaff Cemetery and extension to a boundary wall at Cardiff Cemetery, for T.C. Geo. H. Whitaker, City Architect.

Cardiff.—Painting.—At Mansion House, Richmond-rd., and Hayes Fish Market premises, for T.C. G. H. Whitaker, City Architect.

Chester.—Houses.—54 parlour and 2 non-parlour, on Eaton-rd. site, for T.C. C. Greenwood, City S. Dep. £2 2s.

Clontarf.—Repairs.—To thirty-eight cottages, for the Irish Sailors' and Soldiers' Land Trust. R. E. Beckerson, Chief Clerk, 50-51, Upper Mount-st., Dublin. Dep. £1 1s.

Dagenham.—Sanitary Convenience.—Construction of underground, for men and women, at Chequers-parade, Dagenham, for the U.D.C. Acting Engineer and Surveyor to the Council, Council Offices, Becontree-avenue, Chadwell Heath, Essex. Dep. £2 2s.

Farnworth.—Houses.—Ten in Fern-st. and thirty in Daffodil-rd., for U.D.C. F. Ashton, E. and S. Dep. £2.

Filey.—Houses.—72 non-parlour types, and for construction of necessary street works and sewers in connection therewith, for U.D.C. H. C. Cowen, S. Dep. £1 1s.

Hendon.—Fencing.—675 yds. of wrought-iron unclimbable railings and about 370 yds. of chain link wire fencing, at Mill Hill-park and Basing-hill recreation ground, for U.D.C. A. O. Knight, E. and S.

Hull.—Shops.—Block of four shops and eighteen tenement dwellings, Hendon-rd., for Corporation. D. Harvey, A.R.I.B.A., City Architect.

Hull.—Dwellings.—4 shops and 18 tenement dwellings, Hedon-rd., for Corporation. D. Harvey, A.R.I.B.A., City Architect.

Keighley.—Houses.—35, for Guard House Housing estate. E. G. Felgate, A.R.I.B.A., Borough Architect. Dep. £2.

Leamington Spa.—Cottages.—56, for T.C. J. J. Kennan, B.E. Dep. £2 2s.

Newton.—School.—Elementary school to accommodate 124 children, for Isle of Ely C.C. R. S. W. Perkins, C.S., County Hall, March. Dep. £3 3s.

Penygraig.—Extensions.—Also alterations to Tonyrefail Branch, for Penygraig Industrial Co-operative Society. W. T. Springall, L.R.I.B.A., Architect's Department, Co-operative Wholesale Society, St. Mary-st., Cardiff. Dep. £2 2s.

Plymouth.—Repairs.—Also painting, etc., at pontoon at Pottery Quay, for T.C. J. Wibberley, City Engineer, Surveyor and Architect. Dep. £1 1s.

Plymouth.—Repairs.—Also alterations to premises at 8, Castle-st., for C.B. R. J. Fittall, Town Clerk.

Rugby.—Cottages.—12, at Station-lane, Clifton-on-Dunsmore, near Rugby, for R.D.C. J. E. Weeks, surveyor and architect, Temple-st. Dep. £2 2s

Sheffield.—Building.—Public washhouse, Upperthorpe, for T.C. W. Geo. Davies, F.R.I.B.A., City Architect. Dep. £2.

Stockport.—Extensions.—To Central premises, for Stockport Industrial and Equitable Co-operative Society, Ltd. S. Lloyd, General Secretary. Dep. £5.

Tumble.—Cottages.—Reparation works to 28 cottages at Tumble, Carmarthenshire, for Amalgamated Anthracite Collieries, Ltd. R. S. Griffiths & Partners, architects and surveyors, Tonypandy.

JANUARY 22.

Carnalbana.—Alterations to public elementary school, for Larne Regional E.C. Chief Architect, Ministry of Finance, Northern Ireland.

Dublin.—Painting.—Also distempering at Custom House, for Commissioners of Public Works. T. Cassedy, secretary, Office of Public Works.

Glasgow.—Installation.—Electric lighting installation at (1) Haghill No. 1; and (2) Saracen-st. No. 1 rehousing schemes, for T.C. General Manager, 78, Waterloo-st.

Ormskirk.—Houses.—32 non-parlour type on their Tower Hill site, for U.D.C. H. W. Chadwick, S. Dep. £2 2s.

Prestwich.—Wall.—Excavation of 2,000 cub. yds. approximately of earth, and building of 46 lin. yds. approximately of retaining wall on Polefield estate, and fronting Half Acre-lane, for U.D.C. M. A. Piercy, Architect and Surveyor. Dep. £1 1s.

Prestwich.—Houses.—40 "A2" type, on Polefield estate, fronting Half Acre-lane and Cuckoo-lane, for U.D.C. M. A. Piercy, architect and surveyor, Dep. £2 2s.

Soulsgate.—Painting.—Certain painting work, etc., at Relief Station, 216, St. Georges-rd., for B.G. W. Barrow, clerk, Union Offices, Harley-st., Hull.

Southall-Norwood.—Cottages.—Erection of 28, on the Brickfield site, divided into six blocks, and contractors may tender for one or more blocks, for the Southall U.D.C. J. B. Thomson, A.M.Inst.C.E., Town Hall, Southall. Dep. £2 2s.

JANUARY 23.

Bingham.—Painting.—Painting and decorating of interior of Poor Law Institution, Nottingham-rd., and painting of whole of exterior woodwork, ironwork, etc., of the above-named Institution and of children's cottage home, Fairfield-st., Bingham; also interior painting and decorating at the said cottage home, for B.G. C. W. Kendrick, Council Offices. Dep. 10s.

Chelsea.—Articles and Works.—Execution of for a period being from April 1 next to March 31, 1930, unless otherwise stated, for the Chelsea B.C. John T. Jeffreys, T.C., and W. R. Manning, B.S., Town Hall, King's-rd., Chelsea, S.W.3.

Darwen.—School.—Senior elementary school for 440 children on site in Avondale-rd., for T.C. B.E. Dep. £3 3s.

Gravesend.—Houses.—30 parlour-type on King's Farm estate, for T.C. J. G. Bennett, L.R.I.B.A., 6, Woodville-terr. Dep. £2 2s.

Hull.—Fencing.—1,650 yds. of arris pale fence, 5 ft. 6 in. high, in Preston-rd., for T.C. T. Thomas, City E

Leeds.—Alterations to shelters at Central Home, Street-lane, Roundhay, for B.G. J. H. Ford, clerk, 11, South-parade.

London.—Heating.—Accelerated low pressure hot water heating at Telephone Exchange, Norbury, S.W., for H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

Luton.—Bathhouse.—At refuse destructor, Windmill-rd., for T.C. B.E. and S., 18, Upper George-st.

Oldham.—Houses.—Erection of 200 (Type B), on the Limeside Housing site, in blocks, for the Oldham B.C. Housing Committee. B.E. and S., Town Hall, Oldham. Dep. £2 2s.

Tavistock.—Houses.—4, at Princetown and 6 at Buckland Monachorum, for R.D.C. T. H. Harris, architect, Council Offices.

JANUARY 24.

Dagenham.—Fencing.—2 ft. 6 in. high ornamental fencing at Valence Park, Chadwell Heath, for U.D.C. E. and S.

Dewsbury.—Painting.—Also decorating of certain offices, corridors, etc., for C.B. H. Dearden, A.R.I.B.A., Borough Surveyor.

Glasgow.—Houses.—204, on Saracen-street housing scheme No. 2, for T.C. D. Stenhouse, Town Clerk.

Kendal.—Houses.—38, at Castle-rd., for T.C. F. W. Oxberry, B.S.

***Middlesex.**—Houses.—Erection of further 72 at Acton, and 54 at Hayes, for the G.W. (London) Garden Village Society, Ltd. T. Alwyn Lloyd, F.R.I.B.A., 6, Cathedral-rd., Cardiff.

Newhaven.—Conveniences.—Public lavatory in town and small lavatory in cemetery grounds, Lewes, for U.D.C. C. T. Hooper, S.

Leigh.—Houses.—Erection of 132 non-parlour type on the Cow-lane Housing Estate, for the T.C. B.E. and S., Town Hall, Leigh. Dep. £2 2s.

Plymouth.—Lighting.—Electric light installation at Smallpox Hospital, Lee Mill, near Ivybridge, for T.C. J. Wibberley, City Engineer, Surveyor and Architect.

JANUARY 25.

Aberdeen.—Convenience.—Public convenience at Balnagask, for T.C. Thos. F. Henderson, B.S.

JANUARY 28.

Birmingham.—Alterations.—To stores accommodation at the Infectious Diseases Hospital, Yardley-rd., Little Bromwich, for T.C. Messrs. Dallas & Lloyd, architects, Cornwall-buildings, 45, Newhall-st.

Felixstowe.—Houses.—24, in Maidstone-rd., for U.D.C. H. Clegg, E. and S. Dep. £5

Glasgow.—Convenience.—Public convenience in Balmarnock-rd., for T.C. D. Stenhouse, T.C.

Penmaenmawr.—Houses.—2 houses at Treforris-rd., for U.D.C. J. Parry-Hughes, S. Dep. £2 2s.

Purley.—Houses.—Erection of 20, at Farleigh-rd., Sanderstead, for the Coulsdon and Purley U.D.C. Gilbert A. Ballard, O.B.E., A.M.I.C.E., surveyor, 69, Brighton-rd., Purley. Dep. £5 5s.

JANUARY 29.

Belfast.—Building.—Building of Saint Simon's Church, Donegall-rd. R. M. Close, M.R.I.A.I., architect, 13, Donegall-sq. North. Dep. £2 2s.

Deptford.—Pumping Station.—Erection of engine house, boiler house, two elevated steel bunkers, square chimney shaft, subways, etc., at the Deptford Pumping Station, for the M.A.B. Chief Engineer's Dept. (Room 201), Offices of the Board, 173, Rosebery-av., E.C.1. Dep. £10.

Eldwick.—Painting.—Internal, at Eldwick Sanatorium, near Bingley, for West Riding C.C. West Riding Architect, County Hall, Wakefield.

Glasgow.—Conversion.—Of family home, St. Andrew's-st., for use as additional police headquarters, for T.C. D. Stenhouse, T.C. Dep. £3 3s.

Hammersmith.—Wall Repairs.—Repair of the river walls and coal yard walls at the Hammersmith Pumping Station, for the M.W.B. Chief Engineer, Office of the Board, Chief Engineer's Department (Room 201), 173, Rosebery-avenue, E.C.1. Dep. £2.

Lifford.—Reconstruction.—Of County Council Offices, for Donegal C.C. W. J. Doherty, architect, 12, Castle-st., Derry.

Nottingham.—Alterations.—At V.D. Clinic, North Church-st., for T.C. T. W. Gordon, City E. and S. Dep. £1.

Pomeroy (Ireland).—Latrines.—At St. Brigid's P.E. school, Altmore, Pomeroy, County Tyrone. M. Kerr, P.P. manager, St. Mary's, Pomeroy.

Poole.—Houses.—28 at Haskells estate, Newtown, and 24 houses at Coles-av., Hamworthy, for T.C. E. J. Goodacre, B.E.

Rathmines and Rathgar.—Alterations.—At Gate Lodge at Charleville, Dartry-rd., for U.D.C. S.

Shipley.—Houses.—109 on Albert-rd., Thackley Old-rd. and Wrose Brow-rd., for U.D.C. H. Dawson, architect and surveyor.

JANUARY 30.

Ireland.—Building.—For (1) extending farm buildings, etc., at Colaiste Ide, Dingle, Co. Kerry; (2) reconstruction of building for Garda Siochana, at Ballyfeard, Co. Cork; (3) adaptation of Muff Garda Siochana Station, Co. Donegal; (4) enlarging Ballinamore National school, Fintown, Co. Donegal, for Commissioners of Public Works. T. Cassedy, secretary, Office of Public Works, Dublin. Dep. £1 each.

Leeds.—Houses.—112, and flats, on Hawksworth Wood housing estate, for T.C. W. T. Lancashire, City E.

Swadlincote.—Housing.—Erection of 80 houses, fencing and drainage, and construction of roads and sewers, on a site situate at Upper Midway, for U.D.C. Baines, Provis & Cope, A.R.I.B.A., 22, Friar-lane, Leicester.

JANUARY 30.

Kingston.—Painting.—Also repairs at Central Relief Institution, for B.G. W. Taylor, clerk.

JANUARY 31.

Bexleyheath.—Houses.—Erection of 50, on the Pickford-lane site, Bexleyheath, for U.D.C. W. T. Howse, surveyor, Council Offices, Bexleyheath. Dep. £2 2s.

***Folkestone.**—Houses.—Erection of 20 non-parlour type, on the Canterbury-road-Dover-road Housing site, for the Corporation. A. E. Nichols, M.Inst. C.E., Borough Engineer, Municipal Offices, Folkestone. Dep. £2 2s.

Leeds.—Physics Department.—Erection of, on a site adjoining Woodhouse-lane, Leeds. The Registrar, The University, Leeds. Dep. £3 3s.

***Stafford.**—Houses.—Erection of 47 houses, parlour and non-parlour, for the Stafford Corporation. W. Plant, Borough Engineer, Borough Hall, Stafford. Dep. £1 1s.

***Yeovil.**—Houses.—Erection of 50 parlour-type, in Seaton-road, for the Yeovil B.C. Borough Surveyor, Municipal Offices, Yeovil. £1 11s. 6d.

FEBRUARY 5.

***Stroud (Glos.).**—Houses.—Erection of 20 alternative tenders required for brick and reinforced concrete, for the Stroud U.D.C. Frank S. Cutler, Engineer and Surveyor, Stroud. Dep. £5.

FEBRUARY 7.

London.—Repairs to Chimney Stacks.—At the various establishments of the Stepney Board of Guardians. S. McClelland, Clerk, Administrative Offices, Bancroft-rd., Mile End, E.1. Dep. £1. (Cheques payable to the Treasurer).

FEBRUARY 8.

***Brentford and Chiswick.**—Works and Materials. —Execution of works, and the supply of materials, for a period of 12 months, commencing April 1, 1929, for the Brentford and Chiswick U.D.C. Edward Willis, M.Inst.C.E., F.S.I., Engineer and Surveyor, Town Hall, Chiswick, W.4.

FEBRUARY 12.

Essex.—Secondary School.—Erection of Palmer's endowed proposed new Secondary School for Girls, Grays, for the Essex Education Committee. Jno. Stuart, F.R.I.B.A., County Architect, Springfield Old Court, Chelmsford. Dep. £2 2s., to F. H. Owers, County Accountant, Duke-st., Chelmsford.

MATERIALS, etc.

JANUARY 21.

Beverley.—Stone.—For D.C. E. Picker, S.

Norwich.—Road Materials.—For T.C. J. S. Bullough, City E.

Ongar.—Edge Kerb.—For R.D.C. H. C. Phillips, District S.

Pierrepoint.—Highway Materials.—For R.D.C E. Grantham, clerk, Wickham Market.

Skegness.—Road Materials.—For U.D.C. R. H. Jenkins, E. and S.

Sleaford.—Highway Materials.—For R.D.C. G. Dale, clerk.

Uckfield.—Road Materials.—For R.D.C. Capt. E. W. Ray-Johnson, Highways Surveyor.

JANUARY 22.

Belfast.—Stone, etc.—3,500 tons of 2 in. broken stone, for C.B. R. B. Donald, City S.

Cairo.—Asphalt.—6,800 metric tons of asphalt, for Tanzin Department, Cairo. Department of

Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. No. B.X. 4920.)

Johannesburg.—Pipes.—Steel and cast-iron pipes and cast-iron fittings, etc., for Grahamstown T.C. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 7182.)

Pudsey.—Pipes.—260 yds. of 4 in. water pipes, S. and S. coated; also 1,032 yds. of 3 in. water pipes, with hydrants and special pipes, for T.C. Alfred E. Evans, Town Clerk.

Southall-Norwood.—Builder's Materials, for U.D.C. J. B. Thomson, E. and S.

Willesden.—Highway Materials.—For U.D.C. F. Wilkinson, E.

JANUARY 23.

Liverpool.—Railings.—370 yds. wrought-iron railings, 3 ft. 6 in. high, for T.C. City E.

JANUARY 24.

Alton.—Road Materials.—For R.D.C. V. J. Gadban, 46, High-st.

Chorley.—Road Materials.—For R.D.C. W. Cotterill, S.

Daventry.—Bituminous Compounds.—For R.D.C W. Charles Robson, Highway Surveyor.

Essex.—Highway Materials.—For C.C. Wm. H. Morgan, C.S.

Gravesend.—Road Materials.—For T.C. B.E. and S., 5, Woodville-ter.

JANUARY 25.

Devon.—Road Materials.—For C.C. R. M. Stone, C.S. (N.W. Division), 9a, High-st., Barnstaple.

Gainsborough.—Road Materials.—For R.D.C. E. Donelly, S.

Woodford.—Highway Materials.—For U.D.C. A. D. Ward, S.

JANUARY 26.

Glamorgan.—Road Materials.—For C.C. G. A. Phillips, C.S.

Hertfordshire.—Road Materials.—For C.C. A. E. Prescott, C.S.

London.—Road Materials.—For Paddington B.C. W. F. Abbiss, T.C.

JANUARY 28.

Lydd.—Tar, etc.—For T.C. W. Lamacraft, T.C.

Ongar.—Granite.—For R.D.C. H. C. Phillips, District S.

Sunderland.—Builder's Materials.—For C.B. B.E.

Thrapston.—Highway Materials.—For R.D.C. J. George Murray, E. and S.

West Suffolk.—Highway Materials.—For C.C. E. H. Bond, C.S.

ENGINEERING. IRON AND STEEL

JANUARY 21.

Hertford.—Bridge.—New bridge about 20 ft. span and other work connected therewith in the Hennebique System, for T.C. Mouchel & Partners, Ltd., civil engineers, 36-38, Victoria-st., S.W.1. Dep. £3 5s.

London.—Extension.—Steelwork for extension to jetty No. 4, for Assam-Bengal Railway Co. Thos. C. Brett, secretary, Bishopsgate House, 80, Bishopsgate, E.C.2

Perth.—Reservoir.—Reservoir on Carse Burn, near North Cassochie, embankment being about 20 ft. in height; supplying and laying about 1,200 yds. of 6-in. fireclay pipe and about 6,000 yds. of iron or steel pipe of 5, 4, and 3-in. diameter; construction of a concrete service reservoir and of a break-pressure tank, at Methven, for C.C. Gilbert Thomson & Son, chartered civil engineers, 164, Bath-st., Glasgow, C.2. Dep. £2 2s.

Wigton.—Water Supply.—Supply of about 65 miles of vertically cast-iron pipes of 7 in., 5 in., 4 in., 3 in. and 2 in. diameter; together with excavation of trenches, hauling, laying, jointing and hydraulically testing of pipes; provision and fixing of necessary valves, fire hydrants; and construction in concrete of Rosley service reservoir, close service reservoir, Wood House balancing tank, and intake tanks at Townthwaite and at Greenfoot, for R.D.C. Taylor & Wallin, engineers, 1, Saville-place, Newcastle-upon-Tyne. Dep. £10.

JANUARY 22.

Whittingham.—Sewerage.—Laying and jointing complete, together with inspection chambers, of 4 in. and 6 in. earthenware surface water drains, together with the construction of a sewage disposal works, including concrete settling tank, sludge pumping wells and building, three circular sprinkling filters, humus tanks, sludge beds, etc., at the Mental Hospital, for C.C. H. B. Ward, consulting engineer, 15, Lord-st., Liverpool. Dep. £2.

JANUARY 28.

West Riding.—Calverley Bridge.—Ferro-concrete bridge to carry Calverley and Horsforth new road over Waterway of Leeds and Liverpool Canal Co., for West Riding C.C. West Riding Surveyor Dep. £1.

JANUARY 31.

Johannesburg.—Bridgework.—Structural bridgework, for South African Railways and Harbours. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. No. A.X.7227.)

ROAD, SEWERAGE, AND WATER WORKS

JANUARY 21.

Belfast.—Road.—Levelling of ground, formation of and kerbing to footpaths, and channelling of portions of partly completed streets at Whitewell (extension) site, Whitewell and Serpentine-rds., for Corporation. Superintendent of Housing.

Bexleyheath.—Making-up.—Of Edmund-rd. and Coton-rd., Welling, for U.D.C. W. T. Howse, S. Dep. £1 1s.

Dewsbury.—Sewage.—Valves, penstocks, and other ironwork required in the extensions to Sewage Disposal Works, Mitchell Laithes, for C.B. James Diggle & Son, consulting engineers, Hind Hill-st., Heywood. Dep. £1 1s.

Eastbourne.—Sewers.—(1) Proposed new sewers Kingston-rd.; (2) new surface water sewer, Lottbridge-rd., for the Highways Committee, Eastbourne B.C. Borough Engineer's Office, Town Hall, Eastbourne.

Ilford.—Making-up.—Of Cranbrook-rise, Fairholme-rd., Gordon-rd. (part), Pavilion-rd. (part), St. Andrew's-rd., St. Edmund's-rd., St. Helen's-rd., Vaughan-gardens, and Woodstock-gardens, for T.C. B.E. and S. Dep. £2 2s. each.

Inverkeithing.—Roadway.—Constructing roadway and footpaths at Spencerfield housing scheme, for T.C. P. Reid, architect. Dep. £1 1s.

Poole.—Making-up.—Also surface-water draining Grove-rd., for T.C. E. J. Goodacre, B.E. Dep. £1 1s.

Shardlow.—Sewerage.—Sewer in Duffield-rd., Little Eaton, for R.D.C. Elliott & Brown, chartered civil engineers, Burton-buildings, Parliament-st., Nottingham. Dep. £3 3s.

Slough.—Improvements.—Widening Upton-rd over a length of 240 yds., approx., for U.D.C. A. Bromly, E. and S.

JANUARY 22.

Chorley.—Pipes.—Cast-iron pipes required for new outfall sewer, for T.C. B.S. Dep. £2 2s.

Glasgow.—Roads.—Roads and sewers at Quarrybrae-st., for Corporation. Director of Housing, 20, Trongate, C.1.

London.—Reinforced Concrete Roadway, etc.—To West Loading Yard, Mount Pleasant Letter Office, E.C., for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

Luton.—Sewerage.—Laying of 5½ miles of stoneware pipe foul water sewers in Lee Ward, for T.C. J. W. Tomlinson, B.E. and S. Dep. £1 1s.

Marsden.—Reconstruction.—Subsoil drainage scheme at Standedge, on Wakefield and Austerland main road, for U.D.C. J. Smith, E. and S. Dep. £2 2s.

Southall-Norwood.—Roads.—Roads and sewers in Greenford-av. extension, East-av., and Shackleton-rd. extension, for U.D.C. J. B. Thomson, Housing Architect. Dep. £2 2s.

JANUARY 23.

Ayr.—Water Supply.—Excavation and refilling of trenches for and the laying and jointing of about 3,000 lin. yds. of 24 in. diameter and about 2,000 lin. yds. of 21 in. diameter steel pipes, between Loch Finlas and the lower end of Loch Doon, and other relative work, for T.C. Warren & Stuart, engineers, 94, Hope-st., Glasgow. Dep. £2 2s.

Ayr.—Water Supply.—8,800 lin. ft. of 24 in. diameter and about 5,800 lin. ft. of 21 in. diameter bitumen lined steel pipes, together with bitumen lined steel specials and cast-iron specials, for T.C. Warren & Stuart, engineers, 94, Hope-st., Glasgow. Dep. £2 2s.

Hull.—Road.—Construction, in reinforced concrete, of Preston-rd. continuation, from Marfleet-lane to Poorhouse-lane, and also of second carriageway of Bricknell-av., from Chanterlands-av. to Near Salt Ings-lane, for T.C. T. Thomas, City E.

Littlehampton.—Pipes.—231 yds. of 3-in., and 232 yds. of 4-in. vertical dry sand-cast-iron S. and S. pipes, for U.D.C. A. Shelley, clerk.

London.—Asphalte Paving.—Surfacing the garage approach at St. Andrew's Hospital, Devons-rd., Bow, E. (approx. 500 yards), for the Poplar Board of Guardians. Harley Heckford, M.Inst.E., B.S., Council Offices, High-st., Poplar, E.14. Dep. £1 1s.

Marsden.—Drainage.—Subsoil drainage scheme at Standedge, on Wakefield and Austerland main road, for U.D.C. J. Smith, E. and S. Dep £2 2s.

JANUARY 24.

Ealing.—Sewer.—New soil sewer in Eastcote-lane, Northolt, and manholes, etc., for T.C. W. R Hicks, B.E. and S. Dep. £2 2s.

South Shields.—Making-up.—Of Beach-rd., for C.B. J. Paton Watson, B.E.

Teddington.—Making-up.—Of Cambridge-crescent, for U.D.C. E. Bostock, S. Dep. £2 2s.

JANUARY 26.

Coulsdon and Purley.—Improvements.—Sewering of section of Old Lodge-lane, Purley, for U.D.C. G. A. Ballard, S. Dep. £1 1s.

Coulsdon and Purley.—Sewering.—Of portion of main Brighton-rd., between Purley Tram terminus and the Red Lion Hotel, Coulsdon, for U.D.C G. A. Ballard, S. Dep. £5 5s.

Coulsdon and Purley.—Making-up.—Of Norman av., Sanderstead, for U.D.C. G. A. Ballard, S. Dep. £1 1s.

Coulsdon and Purley.—Improvements.—At junction of Station-rd. and Godstone-rd., Kenley, for U.D.C. G. A. Ballard, S. Dep. £1 1s.

Exmouth.—Sewerage.—2,100 yds. of 12 in. and 9 in. stoneware pipe sewers, with manholes and other contingent works, in Littleham, for U.D.C. S. Hutton, E. and S. Dep. £1 1s.

JANUARY 28.

Hazel Grove and Bramhall.—Levelling.—For (a) drainage of recreation ground; (b) ground levelling, ploughing, and seeding of recreation ground, for U.D.C. R. A. Knight, clerk. Dep. 10s. 6d.

Sunderland.—Paving.—Draining, paving, channelling, kerbing, macadamising, etc., of West Moor-rd., from South-West corner of 1, West Moor-terrace, for 270 yds. or thereabouts in an easterly direction, for C.B. B.S. Dep. £2 2s.

Windsor.—Sewerage.—Sewerage works for construction of about 3¼ miles of 6-in., 7-in., 9-in. and 12-in. stoneware pipe sewers, with manholes and other works incidental thereto, at Sunninghill, for R.D.C. Messrs. Lemon & Blizard, engineers, 9, Victoria-st., Westminster Dep. £5 5s.

JANUARY 30.

Cardiff.—Surfacing.—Supplying and laying about 13,000 sq. yds. of asphalt surfacing to carriageways in Whitchurch, near Cardiff, for R.D.C W. Farrow, E. and S. Dep. £2.

London.—Sewer.—Construction of about 340 ft. of 4 ft. by 2 ft. 6 in. brick sewer, mostly in tunnel, and contingent works beneath Butler-st. and Moor-lane, for Corporation. City Engineer, Portland House, Basinghall-st., E.C.2. Dep. £2 2s.

HENDERSON

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WRITE FOR BOUND CATALOGUE B.26 TO-

P.C. HENDERSON, LIMITED,

TANGENT WORKS, BARKING, ESSEX.

Auction Sales, Tenders, etc.

JANUARY.

Surrey.—John Sulley, F.A.I., by order of the trustee in bankruptcy re T. A. Edwards, in bankruptcy, at Anchor Wharf, Windmill-lane, Long Ditton, Surrey, new and well-assorted stock of a general builder's merchant. Auctioneer, 46, Cannon-st., London, E.C.4.

JANUARY 22.

London.—Joseph Hibbard & Sons will sell, by order of Mr. C. Blumson, owing to the premises being pulled down, upon the premises, No. 1, Wilmer-gardens, Hoxton-street, stock of imported hardwoods. Auctioneers, 15, Newington-green, Islington, N.16.

JANUARY 23.

***London.**—Henry J. Shaw will sell by Order of the receiver, A. R. Green, F.S.S.A., re Beko Lamp Co., Ltd., at the sale rooms, 13, High Holborn, W.C.1, the whole of the stock, office furniture and lease of the above-named concern. Auctioneer, 129, Newington-causeway, S.E.1.

JANUARY 23, and following day.

***Wokingham.**—Charles R. Davis & Co. will sell, under a Deed of Assignment, re H. Dyke, trading as J. B. Seward and Co., by order of the Trustee, at the yard and workshops, "Crown Works," Langborough-rd., Wokingham, Berks, stock-in-trade, plant and machinery of a builder and contractor. Auctioneers, 285, Borough High-st., London, S.E.1, and at Croydon.

Public Appointments

JANUARY 22.

Durham.—Architectural Assistant required by the Durham C.C. Dir. of Edu., Shire Hall, Durham.

JANUARY 23.

Nelson.—General Foreman and Clerk of Works (joint position) required by the T.C., for the erection of an open-air school. Town Clerk, Town Hall, Nelson.

Southport.—Temporary Architectural Assistant required by the Southport B.C. A. E. Jackson, M.Inst.C.E., Town Hall, Southport.

JANUARY 24.

***Salford.**—Building Surveyor required in the City Engineer's Department, by the City of Salford. City Engineer, Town Hall, Salford.

FEBRUARY 9.

***Bradford.**—Architectural Assistant required by the Bradford City Council. City Architect, Town Hall, Bradford.

APRIL 3, 4, 5.

London.—London Building Act, 1894.—District Surveyors at a London Centre, an examination of persons presenting themselves for the purpose of being examined for duties of District Surveyors. Clerk of the Council, the County Hall, Westminster Bridge, S.E.1.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians, B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board; Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; County Architect. C.A.; Surveyor, S.; Engineer, E.; Borough Architect, B.A.; Architect A.

Altrincham.—Groves & Whitnall, Ltd., brewers, Regent Brewery, Salford, propose to make improvements to Station Hotel. Charles Clegg & Son, 30, Brown-st., Manchester, architects.

Arnold.—U.D.C. propose to erect additional houses on Grove estate. Tenders are to be invited.

Barnby, Sandall.—Start is to be made upon the Congregational church at Kirk Sandall.

Barwick-in-Elmet.—West Riding E.C. recommend that new school be provided, to accommodate 200 children, at £7,000.

Bentley-with-Arksey.—Temporary buildings at present on site of Bentley-rd. Council school are to be transferred to Thorne Goole-rd. Council school site, reconditioned and re-erected at £700 for West Riding E.C.

Bexley.—U.D.C. passed plans: 2 houses, Ethronvi-rd., for W. & A. Smith; 6 houses, Tidford-rd., and 8 Monkton-rd., Central-av. estate, for Stevens & Sons; 4 houses, Churchfield-rd., for W. H. Mulley; 12 bungalows, Dorcis-av., for D. C. Bowyer; 4 houses, Oaklands-rd., for W. and A. Smith.

Bingley.—West Riding C.C. recommend extra £510 for provision of proposed sanatorium at Bingley Training College.

Birmingham.—J. W. Simister, L.R.I.B.A., Union-chambers, Congrove-st., is architect for premises in High-st., King's Heath, for Ten Adres & Strichley Co-operative Society, Ltd.

Blackburn.—T.C. passed plans: 6 houses, Burnley-rd., G. Foster; 8 houses, Lammack-rd., W. Ainsworth; 6 houses, Burnley-rd., T. Eccles.

Bolton.—J. Hamer, Bromley Cross Brewery, proposing to make alterations to Wilton Arms public-house, Belmont-rd. Plans by T. E. Smith & Son, architects, Central-chambers.

Bourne.—U.D.C. recommend surveyor to prepare plans and lay-outs for another 24 houses of existing type, on Council's Hereward estate, with alternative plans for further houses.

Bradford. — Site at Ravenscliffe-av. and Thackeray-rd. on Eccleshill House site, is proposed to be transferred to the E.C. for a school. —It is proposed to allocate site on Coppy Quarry estate for premises for accommodation of Weights and Measures Department.

Brighouse.—West Riding E.C. recommend that site, being part of Slead Hall estate, be purchased for purpose of erection of combined secondary school and technical institute.

Burton.—Corporation is recommended by Markets Committee to purchase "The Man in the Moon" public-house, only property now standing on Market place site, for £10,000.

Chertsey.—Plan of alterations to The Prince Regent, Guildford-st., been approved for Mann, Crossman & Paulin, Ltd.

Dewsbury.—Harry Senior's furnishers, etc., 44-52, Daisy Hill, proposing to carry out alterations to premises. Plans by W. F. Cave, architect, High-st., Heckmondwike.

Douglas.—T.C. passed plans: rebuilding of premises, Old Strand Inn, 72, Strand-st., on behalf of Mr. Campbell; 3 lock-up shops, Victoria-rd., on behalf of P. White.

Eastbourne.—Proposal to provide municipal aerodrome been favourably received by T.C., who asked B.E. to report on suitable site.—Sanction of Ministry been received by Council to borrowing of £35,000 for purchase by town of Chatsworth Estate Company's portion of downs.

Ecclesfield.—West Riding E.C. recommend that new school be provided at Ecclesfield Town for senior mixed scholars with middle school classes, to accommodate 300 children, at £11,000, and woodwork, metalwork and science room at Ecclesfield High Green Council school, at £2,900.

Gosport.—Plans been prepared for alterations and additions to War Memorial Hospital. Architects, Young & Hall, FF.R.I.B.A., 17, Southampton-st., Bloomsbury, W.C.

Greetland.—West Riding E.C. recommend alterations and improvements at Council school, at £400.

Hatfield (Yorks).—It is proposed to erect new Mission Hall at Duncroft, for C.E. authirities.

Hawarden.—Coppack & Davies, Chester, architects for Council Offices for R.D.C. Estimated cost £3,000.

Hendon.—U.D.C. passed plans: 22 shops, Watling-av., Burnt Oak, W. Newcome Wright; 12 houses, Hurstwood-rd., Golders Green, Golders, Ltd.; 3 houses, Holmdale-av., Mill Hill, T. H. Milam; extensions to garage, Watford By-pass-rd., Hendon, Hendon Central Garage, Ltd.; 21 houses, Watford-way, near Hall-lane, Hendon, E. andrews.

Heston.—Heston and Isleworth E.C. received sanction of B. of E. to the use of the Heston Recreation Ground as a site for a new school. architect is Mr. J. G. Carey, Town Hall-chambers, Hounslow.

High Melton.—West Riding E.C. approved alteration and adaptation of existing house, cottages and buildings to provide four Homesteads, at £2,550.

Hove.—Jewish Synagogue is to be erected. Plans, Mr. M. K. Glass, 20, Saville-row, Newcastle-on-Tyne.

Keighley.—E.C. propose to erect a new public elementary open-air school for approximately 120 children, at Brown-lane.

Leigh.—T.C. passed plans: 3 houses, Orchard-lane, H. Johnson; 3 houses, Holden-rd., J. W. Eaves.

Levenshulme.—Graves & Ellerton, architects, 9, Mount-st., preparing plans for modern hotel on corner of Kingsway and Moseley-rd., for Groves & Whitnall, Ltd., brewers, Regent-rd., Salford.

Lewes.—Postmaster-General has decided to build telephone exchange at Abinger-place.

Limerick.—King John's Castle, Limerick, which been used as barracks, now been handed over to municipal authorities, who will probably convert it into working-class tenements.

Llanelly.—Corporation decided to spend £20,000 on town improvement scheme. Scheme includes extension lay-out of site adjacent to Town Hall, in centre of town.

London (Bermondsey).—B.C. passed plans:—Rebuilding portion over open yard of "Prince of Wales" public house, 105, Bevington-st., for Mann, Crossman & Paulin, Ltd., The "Albion" Brewery, Whitechapel-rd., E.; office building in front of railway arch, 26, Raymouth-rd., for Skelton, Sleath & Co., Ltd., 26, Raymouth-rd.

London (Hackney).—B.C. passed plans: W. J. Bush & Co., Ltd., power house at Messrs. Bush's premises, Ash-grove Works, Ash-grove; A. J. King, Ltd., factory premises rear of Southgate-grove; H. Collis, lock-up garages at rear of 57, Stamford-hill; H. J. Ramus, office building adjoining lock-up garages, Chatham-place.

London (Lewisham).—B.C. passed plans: T. Brown & Son, convenience, Ladywell recreation ground; J. Harrison & Co., sports pavilion, at rear of 230, High-st., Lewisham; Higgins Bros., 28 houses, Longton-av.; F. R. Hipperson, extension to L.C.C. schools in Baring-rd.; A. Coldman & Son, alterations to All Saints' Orphanage, Granville-park.

Louth.—C.C. adopted plans for county offices and stores, at £6,500.

Lovesail.—Scheme is being considered for the acquisition and conversion of Alverleys Hall into an Orphanage suitable for miners' children.

Luton.—B.E. submitted plans further portions of scheme for sewering Lee Ward, at £13,234, and T.C. resolved that tenders be invited.

CHAIRS
FOR ALL PURPOSES
STRONG & INEXPENSIVE

GEO. M. HAMMER & CO. LTD
CROWN WORKS, SUAMESS RD.
BERMONDSEY. LONDON, S.E.16

Lowestoft.—T.C. passed plans for P. W. Watson & Sons, Ltd., for factory extension, Thurston-rd.

Maltby.—West Riding E.C. recommend that additional expenditure of £2,500 be approved in connection with erection of proposed Secondary school

Manchester.—Public Health Committee received notice that M.H. approved site at corner of Oxford-rd. and Denmark-rd. for municipal tuberculosis office in place of that in Hardman-st., Deansgate.

Marsden.—West Riding C.C. are to spend £1,005 on repairs to walls at Clough Lea.

Middlesbrough.—12 semi-detached houses, Jesmond-av., for N. Thompson.

Middleton-in-Wharfedale.—West Riding Public Health Committee recommend that new building, including solarium, dressing rooms, verandah with vita-glass screen, hot water and lavatory accommodation, baths, etc., be provided between Blocks B and C, at cost of £910, at Sanatorium.

Moreton (Cres).—H. E. Davies & Son, F. & A.R.I.B.A., Wellington-buildings, The Strand, Liverpool, architects for public hall in Hoylake-rd., for T. Holt.

Nelson.—Secondary school is to be provided by Lancs E.C. Plans by Mr. Stephen Wilkinson, F.R.I.B.A., County Architect, 16, Ribblesdale-place, Preston.

Newcastle.—Plans passed by Town Improvement Committee erection of Roman Catholic elementary school, near Heaton Hall, to accommodate 250 to 300 children.

Normanton.—B. of E. intimated approval of scheme of extensions at Grammar school, which is estimated to cost £17,700, by West Riding E.C.

Penistone.—West Riding E.C. recommend that Part I of scheme of extensions at Grammar school be proceeded with, at £4,100.

Pinner.—R.D.C. granted permit to Emden, Egan & Co., 7, Garrick-st., Covent-garden, W.C., for shops in Pinner-rd. and Canterbury-rd.

Portsmouth.—T.C. passed plans: McCarthy Bros, 9 houses, Langstone-rd.; A. Kemp, builder, A. J. Cook, owner, 3 shops, Copnor-rd.

Rawcliffe.—West Riding Mental Deficiency Act Committee are to spend £138 in carrying out work in connection with renovation of certain rooms in Rawcliffe Hall Institution.

Rickmansworth.—Proposed new school. It was reported at meeting of Herts E.C. that C.C. authorised the Chairman of Education Committee to purchase about two acres of land at Mill End for the purpose of providing additional school accommodation.

Rotherham.—West Riding E.C. recommend that, subject to sanction being obtained, offer of Rotherham Corporation to vest site for new school to serve Thorpe Hesley, be accepted.

Saddleworth.—Sum of £330 been recommended by West Riding C.C. for rebuilding of walls opposite Masonic Institute, Uppermill.

Salford.—Plans for school in connection with Mount Carmel, Salford parish, been submitted by managers and forwarded by E.C. to B. of E. Architect, W. Ellis, F.M.S.A., 49, Deansgate, Manchester.

Settle.—Plot of land is to be purchased as a site for proposed hostel in connection with Settle Girls' High school.

Skegness.—U.D.C. approved plan of Lindsey C.C. for new Court House, adjoining present police station on Roman Bank.

Skelmanthorpe.—New middle school is to be built for West Riding E.C. to accommodate 470 children, at £17,000.

South Kirkby.—West Riding E.C. are to build special subjects rooms at Common-rd. Council school, at £2,500.

Southport.—Packer & H. Crampton, L. & A.R.I.B.A., Adelphi-chambers, 30, Hoghton-st., are architects for Church of SS. Simon and Jude, on High Park-rd., for C.E. Authorities.

Southport.—T.C. passed plans: Lloyds Bank, Ltd., London, E.C.2, for bank premises, three lock-up shops and flats, at corner of Lord-st. and London-st.

South Shields.—Corporation appointed sub-committee to consider possibilities of establishment of municipal aerodrome.

Southwick.—Approval to £18,620 housing scheme at Fishergate given by U.D.C. Plans approved show 3 blocks of 8 flats, 4 blocks of 4 houses, and 1 block of 6 houses, to be erected.

South Yorkshire.—Building, estimated to cost £20,000, to give bathing accommodation for 2,000 miners, is to be erected at Yorkshire Main Colliery Coy.

Stainsliffe.—B.G. seeking borrowing powers for £9,650, required in connection with erection of casual wards at Institution.

Sunderland.—River Wear Commissioners decided to reconstruct groyne, at £5,000, to protect North East Pier.

Swinton.—A new public elementary school is to be provided, to accommodate 360 children, for West Riding E.C.

Taunton.—Somerset C.C. approved plans by County Architect for alterations to second Court in Shire Hall.

Therne.—Revised plans for erection of Goole-rd. proposed new school and caretaker's house, involving an additional estimated cost of £3,350, been approved by West Riding E.C.

Wigan.—Corporation are to have revised plans prepared for school at Pemberton, to accommodate 320 senior schools with handicraft rooms, medical inspection, etc., and central hall. Architect, W. P. Gardner, B.E.

* See also our List of Contracts, Competitions, etc.

PRICES CURRENT OF MATERIALS.*

Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

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Best Stocks	4 5 6
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Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Flettons, £4	£ s. d.		
King's Cross	2 12 3	Best Blue Pressed Staffs	9 5 0
Do., grooved for Plaster	2 14 3	Do. Bullnose	9 15 0
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Best Stourbridge Fire Brick :—

2½ in.	8 11 0	3 in.	10 3 0

GLAZED BRICKS—

Best White Ivory, and Salt Glazed Stretchers	21 0 0	D'ble Str'tch'rs	29 10 0
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Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS

Delivered London

	s. d.		s. d.
2 in. per yd. super.	1 11	3 in per yd. super	2 9
2½ in. ,, ,,	2 4	4 in. ,, ,,	3 6

	s. d.		
Thames Ballast	9 9	per yd.	delivered 2 miles radius Paddington.
Fit Sand	12 0	,, ,,	
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½ in. Shingle for Ferro-Concrete	12 0	,, ,,	
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Per ton delivered in London area in full van loads. Best Portland Cement. British. Standard Specification. Test £2 6 0 to £2 8 0 29s. alongside at Vauxhall in 80-ton lots.

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Ferrocrete per ton extra on above	0 7 6
Super Cement (Waterproof)	3 16 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
,, ,, Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
,, ,, White	3 12 6
,, Fine	5 12 0
Sirapite, Coarse	3 9 0
,, Finish	3 17 0
Grey Stone Lime	2 10 9
Chalk Lime	2 10 9
Best Ground Blue Lias Lime	1 17 6
Hair per cwt.	2 2 6
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NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months carr. pd.

Stourbridge Fireclay in s'cks 37s. 0d. per ton at rly. dp.

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BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube. s. d. 2 10

BEER STONE—RANDOM BLOCK—
Free on rail at Seaton Station per ft. cube 2 3
Delivered free on rail Nine Elms, S.R. per ft. cube 3 1½
Selected approximate size one way, 1d. per cubic foot extra; selected approximately three sizes or for special work, 3d. per cubic foot extra.

PORTLAND STONE.—
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube. 4 4½
Do. do. delivered on road wagons at above stations, per ft. cube. 4 5½
White basebed, 3d. per ft. cube extra.

NOTE.—1d. per ft. cube extra for every foot over 20 ft *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.—
Delivered at any Goods Station, London. s. d.
Random blocks from 10 ft. and over P. ft. cb. 14 0
Sawn two sides ,, 22 6
Sawn three or four sides ,, 27 6

YORK STONE, BLUE—*Robin Hood Quality.*
Delivered at any Goods Station, London.

5 in., sawn two sides landings to sizes (under 30 ft. super)	Per ft. super	5 6
5 in. rubbed two sides, ditto	,,	6 0
3 in. sawn two sides slabs (random sizes)	,,	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes)	,,	1 6½
1½ in. to 2 in. ditto, ditto	,,	1 3½

HARD YORK—
Delivered at any Goods Station, London,

Scappled random blocks	Per ft. cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super)	Per ft. super	5 1½
6 in. rubbed two sides, ditto	,,	6 1½
4 in. sawn two sides slabs (random sizes)	,,	2 1½
3 in. ditto ditto	,,	2 10
2 in. self-faced random flags	Per yd. super	8 6

CAST STONE.

Delivered in London area in full van loads, per ft. cube: Plain, 8s. 6d.; Moulded, 9s. 6d.; Cills, 10s. 0d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£30 0	3 × 6	£21 0
4 × 9	26 0	3 × 11	25 0
4 × 8	25 0	2 × 11	26 0
4 × 7	23 0	3 × 9	24 0
3 × 8	22 0	2½ × 9	24 0
3 × 7	22 0	3 × 4½	21 0
2½ × 7	21 0	3 × 4	21 0

PLANED BOARDS.

1 × 11	£30 0	1 × 9	£28 0

PLAIN EDGE FLOORING

Inches.	per sq.	Inches.	per sq.
⅝	18/-	1½	30/-
⅝	21/-	1½	34/-
1	24/-		

TONGUED AND GROOVED FLOORING

Inches.	per sq.
1	24/-
1½	30/-
1½	34/-

MATCHING (BEST).

Inches.	per sq.
⅝	16/6
⅝	19/-
1	24/-

	s. d.
Ins. BATTENS.	
¾ × 2 ..... per 100 ft.	2 6

SAWN LATHS.

	s. d.
Per bundle	2 6

1" AND UP THICK.

	£ s. d.	£ s. d.
Dry Austrian Wainscot, per ft. cube	0 16 0	to 0 18 0
Dry American and/or Japanese Figured Oak, ft. cube	0 14 0	to 0 15 0
Dry American and/or Japanese Plain Oak, ft. cube	0 10 0	to 0 13 0
Dry sq. edged Honduras Mahogany, ft. cube	0 15 0	to 0 18 0
Dry Log cut Honduras Mahogany, ft. cube	0 16 0	to 1 1 0
Dry Cuba Mahogany, ft. cube	1 1 0	to 1 10 0
Dry Teak, ft. cube	0 13 0	to 0 15 0
Dry American Whitewood, ft. cube	0 10 0	to 0 14 0
Best Scotch Glue, per cwt.	4 10 0	to —
Liquid Glue, per cwt.	4 7 0	to 5 10 0

SLATES.

First quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000.

	£ s. d.		£ s. d.
24 by 12	32 18 4	18 by 10	18 12 11
22 by 12	29 17 11	18 by 9	16 9 2
22 by 11	27 14 2	16 by 10	15 12 6
20 by 12	26 5 0	16 by 8	12 3 9
20 by 10	22 10 0		

TILES.

Delivered at London rate stations in full truckloads of not less than 6 tons. Per 1,000. f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 7 6
ditto hand-made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) Hand-made	0 9 6
Hip and valley tiles (per dozen) Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

	£ s. d.
R.S. Joists, cut and fitted	12 10 0
Plain Compound Girders	14 10 0
Stanchions	16 10 0
,, In Roof Work	19 10 0

MILD STEEL ROUNDS.—To London Station, per ton

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	12 0 0	⅝ in. to ½ in.	10 15 0
⅜ in.	11 0 0	⅝ in. to 2½ in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Tubes. Wrought Mild Steel.	Tubes. Genuine Staffs. Iron.	Fittings. ¼ in. and under.	Fittings. Over ¼ in.	Flanges. ¼ in. and under.	Flanges. Over ¼ in.
	%	%	%	%	%	%
Gas	67½	50	42½	45	52½	55
Water	63½	46½	37½	40	47½	50
Steam	60	42½	32½	35	42½	45
Galv. gas	55	37½	32½	35	42½	45
Galv. water	50	32½	27½	30	37½	40
Galv. steam	45	27½	22½	25	32½	35

C.I.—HALF-ROUND GUTTERS—London Prices ex Works

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/3½	11½d.	3½d.
3½ in.	1/4½	1/1½	3½d.
4 in.	1/6	1/3	3½d.
4½ in.	1/7½	1/4½	4½d.
5 in.	1/10½	1/6½	5½d.,

O.G. GUTTERS.

3 in.	1/8	1/4½	3½d.
3½ in.	1/8	1/4½	3½d.
4 in.	1/9½	1/4½	3½d.
4½ in.	1/11½	1/7½	4½d.
5 in.	2/4½	1/10½	5½d.

RAIN-WATER PIPES, &c.

Per yd. in 6 ft.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/10½	1/3	1/9½
2½ in. ,,	2/0½	1/4½	2/1½
3 in. ,,	2/6	1/9	2/7½
3½ in.	2/11½	2/0½	3/0½
4 in. ,,	3/5	2/6½	3/8½

L.C.C. COATED SOIL PIPES—London Prices ex Works.

	Pipe. angles.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6 fts. plain	3 3	2 4½	2 10
2½ in. ,,	3 9	2 7½	3 7
3 in. ,,	4 6	2 10	4 2½
3½ in. ,,	4 11½	3 7	4 11½
4 in.	5 5½	4 0½	5 9

L.C.C. COATED DRAIN PIPES—London Price ex Works

	Bends, stock angles. s. d.	Branches. Pipe, angles, stock angles. s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 4	5 1	8 0½
4 in. ,, ,,	4 10	5 8	10 0
5 in. ,, ,,	6 6	10 10	17 1
6 in. ,, ,,	6 8	13 2	21 9

Gasken for jointing, 38/6 per cwt.

	Per ton in London. £ s. d.		£ s. d.
IRON—			
Common bars	11 0 0	to	12 0 0
Staffordshire Crown Bars—Good merchant quality	11 10 0	to	12 10 0
Staffordshire Marked Bars	14 0 0	...	15 0 0
Mild Steel Bars	10 0 0	...	11 0 0
Steel Bars, Ferro-Concrete quality, basis price	10 0 0	...	11 0 0
Hoop iron, basis price	11 10 0	...	12 10 0
,, Galvanised	27 0 0	...	28 0 0
Soft Steel Sheets, Black—			
Ordinary sizes, to 20 g.	13 0 0	...	14 0 0
,, ,, ,, 24 g.	14 0 0	...	15 0 0
,, ,, ,, 26 g.	16 0 0	...	17 0 0

Sheets Flat Best Soft Steel, C.R. and C.A. quality—

Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	15 0 0	...	16 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	16 0 0	...	17 0 0
Ordinary sizes, 6 ft. by ½ ft. to 3 ft. to 26 g.	18 0 0	...	20 0 0

No. 1 quality £4 per ton extra.

Flat and Galvanised Corrugated Sheets—

Ordinary sizes, 6 ft. to 9 ft. to 20 g.	16 10 0	...	17 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	17 0 0	...	18 0 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	20 0 0	...	21 0 0

Sheets Galvanised Flat, Best quality—

Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	21 0 0	...	22 0 0
Best Soft Steel Sheets, 22 g. and 24 g.	23 0 0	...	25 0 0
Best Soft Steel Sheets, 26 g.	24 10 0	...	25 10 0
Cut Nails, 3 in. to 6 in.	18 0 0		

(Under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet. English, 4 lb. and up	30 0 0
Pipe in coils	30 10 0
Soil pipe	33 10 0
Compo pipe	34 10 0

NOTE.—Country delivery, 20s. per ton extra; lots under 3 cwt. 3s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes 5s. cwt. extra.

Old lead, ex London area, at Mills	per ton	20 5 0

COPPER.

		s. d.
Seamless Copper tubes (basis)	per lb.	1 1½
Strong sheet	,,	1 0
Thin	,,	1 1
Copper nails	,,	2 3
Copper wire	,,	2 4

PLUMBERS' BRASS WORK.
Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.
½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
29/- 45/- 76/- 153/- 246/- 510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.
½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
41/6 62/- 92/- 174/- 300/- 588/- per doz.

RIVER PATTERN SCREW DOWN MAIN FERRULES.
½ in. ¾ in. 1 in.
39/6 60/- 116/6 per doz.

CAPS AND SCREWS.
1¼ in. 1½ in. 2 in. 3 in. 3½ in. 4 in.
7/6 10/- 14/- 23/- 30/- 42/- per doz.

DOUBLE NUT BOILER SCREWS.
½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
7/6 11/- 17/- 29/- 36/- 63/- per doz.

BRASS SLEEVES.
1½ in. 2 in. 3 in. 3½ in. 4 in.
10/- 12/- 20/- 24/- 31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F.
½ in. ¾ in. 1 in. 1¼ in. 1½ in.
35/- 56/- 98/- 162/- 228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.
1¼ in. 1½ in. 2 in. 3 in.
8 lbs. P. traps ... 33/- 41/- 56/- 101/- per doz.
8 lbs. S. traps ... 35/- 45/- 66/- 126/- ,,

TIN.—English Ingots, 2/6 per lb. SOLDER.—Plumber's 1/1. Tinmen's 1/4, Blowpipe 1/5 per lb.

PAINTS, &c.

Raw Linseed Oil, in pipes	per gallon	0	2 9
,, ,, ,, in barrels	,,	0	2 11
,, ,, ,, in drums	,,	0	3 1
Boiled ,, ,, in barrels	,,	0	3 1
,, ,, ,, in drums	,,	0	3 4
Turpentine in barrels	,,	0	4 3
,, in drums (10 galls)	,,	0	4 5
Genuine Ground English White Lead, per ton		52	0 0

(In not less than 5-cwt. casks.)

Extra for 1-cwt. kegs over 5-cwt. casks is 5/9 cwt.

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (*contd.*)

PAINTS, &c. (*contd.*)

GENUINE WHITE LEAD PAINT.

"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganwyte," "Polacco," "J." Brand, and other best brands (in 14 lb. tins) not less than 5 cwt. lots .. per ton delivered £ 70 s. 10 d. 0

Red Lead, Dry (packages extra) ..	per ton	39	10	0
Best Linseed Oil Putty	per cwt.	0	15	0
Fillicol	"	0	15	6
Size. XD quality	ftn.	0	2	6

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per ft.		Per ft.
15 oz. fourths ..	2½d.	32 oz. fourths	6½d.
15 " thirds ..	3½d.	32 " thirds	8½d.
21 " fourths ..	3½d.	Obscured Sheet, 15 oz.	3½d.
21 " thirds ..	4d.	" " 21 "	4½d.
26 " fourths ..	4d.	Fluted, 15oz.6½d., 21oz.	9d.
26 " thirds ..	6½d.	En'lled, 15 oz. 4½d.,21oz.	6d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES.

	Per ft.
¼ Rolled plate	4½d.
⅜ Rough rolled	5½d.
½ Rough rolled	5½d.
Figured Rolled, Baltic, Oceanic, Arctic Stippolyte, and small and large Flemish White ..	5½d.
Ditto, tinted	8½d.
Rolled Sheet	4½d.
White Rolled Cathedral	4½d.
Tinted do.	6½d.

Cast plate is same price as rough rolled.

VARNISHES, &c.

		Per Gallon. £	s.	d.
Oak Varnish	Outside	0	14	0
Fine ditto	ditto	0	16	0
Fine Copal	ditto	0	18	0
Pale Copal	ditto	1	0	0
Pale Copal Carriage	ditto	1	4	0
Best ditto	ditto	1	12	0
Floor Varnish	Inside	0	18	0
Fine Pale Paper	ditto	0	18	0
Fine Copal Cabinet, ...	ditto	1	2	6
Fine Copal Flatting	ditto	1	0	6
Hard Drying Oak	ditto	0	18	0
Fine Hard Drying Oak	ditto	0	19	0
Fine Copal Varnish	ditto	1	0	0
Pale ditto	ditto	1	2	0
Best ditto	ditto	1	12	0
Best Japan Gold Size		0	12	6
Best Black Japan		0	10	6
Oak and Mahogany Stain (water)		0	12	0
Brunswick Black		0	7	6
Berlin Black		0	14	0
Knotting (patent)		1	5	0
French and Brush Polish		0	17	0
Liquid Dryers in Terebine		0	9	0
Cuirass Black Enamel		0	7	0

Painters' and Decorators' Competitions.

We have received a copy of the 1929 syllabus of the National Competition and Examinations held under the auspices of the National Painters' and Decorators' Joint Education Committee of England and Wales, together with a copy of the 1929 syllabus for the International Travelling Scholarship which is arranged annually by a committee representative of the Master Painters' and Decorators' Federations of England and Wales, Scotland and Ireland. The competitions and examinations referred to in the syllabus are only a small section of the educational work undertaken by master painters through their federations to provide facilities for the training of apprentices and craftsmen. The competitions are now open to all apprentices, journeymen, and employers in England and Wales who come within the respective age classifications, provided that they are definitely engaged in or preparing to follow the craft.

The International Travelling Scholarship, 1929, is for apprentices who have completed or are in course of completing the terms of their apprenticeship with members of the National Federations of Master Painters in England, Wales, and Scotland, and the National Association of Master Painters in Ireland. The value of the scholarship is £60, or such other sum as the committee may determine, and which shall be expended by the holder of the scholarship in visiting and residing in such city or cities either at home or abroad or both and producing while there and handing over to the committee such drawings and coloured sketches of decorative work as the committee may determine and require. Application forms and further particulars can be obtained from the Secretary, Mr. Will Mellor, 9, Albert-square, Manchester.

NEW BUILDINGS IN SCOTLAND

Bo'ness.—ROAD.—The Bo'ness and Carriden Parish Council has appointed a committee to wait upon the Linlithgow District Committee to urge the need of providing work for the unemployed by forming a road along the Forth shore, so as to link up Bo'ness, Blackness, and Queensferry. The estimated cost of the scheme is £22,000.

Dumfries.—EXTENSION.—The consent of the Electricity Commissioners has been obtained by Dumfries Town Council for a £16,000 extension scheme at the Town Council's electricity works.

Edinburgh.—CHURCH.—Among the full petitions granted by the Dean of Guild Court was one for a temporary United Free Church building, which is to be erected at the corner of Gorgie-road and Chesser-avenue. The building is to be erected alongside the present mission hall. Other full petitions granted included :—Mr. George Cairns—two double bungalows at Thorburn-road, Colinton; and Messrs. Westwood & Smith, Ltd.—garage at Sinton Motor Works, Gorgie-road.

Irvine.—BUILDING.—The Irvine Dean of Guild Court has approved the following :—Alterations to Irvine Parish Church manse, estimated to cost £1,350; a cottage to be erected at Thornhouse-avenue by Mr. Thomas Dorian, estimated to cost £500; and alterations to Irvine and Fullarton Literary and Social Institute buildings, estimated to cost £150.

Montrose.—RESERVOIR.—The directors of Montrose Royal Asylum have voted £3,000 towards the provision of a new reservoir and its connections.

Motherwell.—HOUSING.—The Motherwell and Wishaw Town Council has resolved to proceed with the building of an additional quota of 108 houses at an estimated cost of £40,000.

Motherwell. — HOUSES. — The Motherwell Dean of Guild Court has sanctioned the following building work :—Archibald Ferguson, builder—for the erection of three blocks of semi-detached cottages of four apartments each in Kether-street, Low Motherwell; James Cowie, architect, Wishaw —ground-floor cottage of four rooms, scullery and offices in Cleland-road, Wishaw, and for the erection in Kether-street, Motherwell, of a ground-floor cottage of three rooms, scullery and offices; Coltness Building Co.—laying out of streets in Coltness-road, Wishaw, and building of three blocks of semi-detached ground-floor cottages.

Trossachs.—ROAD.—The widening of the Trossachs-road is likely to be proceeded with soon. The West Perthshire District Committee have decided to undertake widening work at an estimated cost of £25,704, subject to a grant of 75 per cent. from the Ministry of Transport.

The Junior Carlton Club: Proposed Annexe.

A new annexe is to be added to the Junior Carlton Club at a cost of approximately £50,000. The building will contain a dining-room, drawing room, and lounge, a swimming pool, the dimensions being 52 ft. by 16 ft., six bachelor flats, each containing sitting room, bedroom and bathroom, and two squash courts of standard size, with shower baths and dressing rooms. The builders are Messrs. Foster & Dicksee, Ltd., Manresa-road, Chelsea, S.W. The plans have been prepared by Messrs. Tatchell & Wilson, FF.R.I.B.A., 32, Strand, W.C. 2.

Calendars.

We acknowledge with thanks the receipt of calendars from Messrs. R. D. Johnson, Clapham & Morris, Ltd.; Messrs Braithwaite & Co. (Engineers), Ltd.; and Messrs. John Lay & Co.

N.P. Bank, Shrewsbury.

We understand that the locks, bronze grip handles, door furniture, floor springs, etc., used in this bank (illustrated in our last issue) were supplied by Messrs. Colledge and Bridgen, Ltd., Church-lane, Wolverhampton.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rate of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers—Masons'‡ Bricklayers'‡ Plasterers'†
Aberdeen	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Airdrie	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Alexandria	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Arbroath	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/5½	1/1
Ayr	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Bathgate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2 to 1/3
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Coatbridge	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Dumbarton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Dumfries	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/6½	1/2
Dundee	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3 †1/2½
Dunfermline	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7½	‡1/2½ †1/2½
Edinburgh	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3½ †1/2½
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/6½	1/7	1/6½	1/7	1/6½	1/6½	1/7	1/2
Glasgow	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Greenock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	1/2½
Hamilton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2
Hawick	1/7	1/7	1/7	1/7–1/7½	1/7	1/7	1/7	1/2½
Helensburgh	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	1/2½
Inverness	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/- to 1/2
Kilmarnock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Kirkcaldy	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/-
Lanark	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Leith	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3½ †1/2½
Motherwell	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Perth	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Stirling	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7½	1/2½
Stirlingshire (Eastern District ..	1/7½	1/9	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Wishaw	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/3½

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 177.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	0
Add if in clay	„ „	1	0
Add for every additional depth of 6 ft.	„ „	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	„ „	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	38	0
Add if in underpinning in short lengths	„ „	7	0
Add if in floors 6 in. thick	„ „	3	3
Add if in beams	„ „	3	9
Add if aggregate 1 : 2 : 4	„ „	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	„ „	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	32	0	0
Add if in stocks	„	7	10	0
Add if in Staffordshire blues	„	22	0	0
Add if in Portland cement and sand	„	1	10	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	„ „	0	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	„ „	0	0	10
Axed in stocks	„ „	0	1	9
Rubbed and gauged jointed in putty camber or segmental	„ „	0	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	„ „	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	„	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	„ „	9	6
Three-quarter-inch on flats in two thicknesses	„ „	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	„ „	1	2

MASON.

		s.	d.
York stone templates fixed	per foot cube	13	0
York stone sills fixed	„ „	22	0
Bath stone and all labour fixed	„ „	10	6
Beer stone and all labour fixed	„ „	15	0
Portland stone fixed	„ „	20	0

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	„	80	9
Do. 24 in. × 12 in. Do. Do.	„	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	0
Do. joists	„ „	5	6
Do. roofs, floors and partitions	„ „	6	0
Do. trusses	„ „	8	6

		¾″	1″	1½″	2″
Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	„	50	0
Do. to beams	per ft. sup.	0	11
Centre for arches	„	1	6
Gutter boards and bearers	„	1	0

FLOORING.

		¾″	1″	1½″	1½″
Deal-edges shot	per sq.	—	44/6	53/-	60/6
Do. tongued and grooved	„	—	49/-	57/6	65/-
Do. matchings	„	45/-	51/-	—	—
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/-	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	„ „	2	1
Add for fitting and fixing	„ „	0	3
Deal-cased frames with 1 in. inner and outer linings, 1¼ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights ; average size	„ „	3	9

DOORS.

		1¼″	1½″	2″
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	„	2/5	2/8	2/11
Two-panel moulded both sides	„	2/8	2/11	3/2
Four-panel Do. Do.	„	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1″	1½″	1¾″
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	„	1/4	1/6	1/9
Add if cross-tongued	„	2d.	2d.	2d.

STAIRCASES.

	1″	1¼″	1½″	2″	2½″
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1½ in.	per ft. run	0	9
Mahogany handrail : average, 3 in. × 3 in.	„ „	6	6
Add if ramped	„ „	12	0
Add if wreathed	„ „	24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	16	3
Plain compound girders	„	19	0
Do. stanchions	„	21	9
In roofwork	„	27	6

RAIN-WATER GOODS.

		3″	4″	5″	6″
Half-round plain rebated joints	ft. run	1/6	1/9	2/-	2/6
Ogee Do. Do.	„	1/9	2/-	2/6	3/3
Rain-water pipes with ears	„	1/9	2/7	—	—
Extra for shoes and bends	each	4/4	5/11	—	—
Do. stopped ends	„	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	„	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	43	0
Do. Do. in flats	„	42	0
Extra labour and solder in coated cesspools	each	6	9
Welf joint	per ft. run	0	6
Soldered seam	„ „	1	3
Copper nailing	„ „	0	3

	½″	¾″	1″	1½″	2″	4″
Drawn lead waste per ft. run	1/2	1/9	2/-	3/4	4/-	—
Do. service „	1/8	2/2	2/7	3/10	—	—
Do. soil „	—	—	—	—	—	6/9
Bends in lead pipe each	—	—	—	—	3/3	8/2
Soldered stop ends „	1/2	1/8	2/1	2/10	3/6	—
Read lead joints „	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints „	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws „	—	—	—	14/7	19/6	—
Bib cocks and joints „	6/4	9/7	15/4	41/-	—	—
Stop cocks and joints „	15/4	17/2	25/8	64/-	—	—

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	6
Do. Do. Sirapite	„ „	2	9
Do. Do. Keen's	„ „	4	0
Add saw lathing	„ „	1	7
Add metal lathing	„ „	2	6
(Not including hangers or runners, etc., for suspended ceilings.)			
Portland cement screed	„ „	2	2
Do. plain face	„ „	3	3
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup.	5	6

GLAZIER.

		s.	d.
21-oz. sheet plain	per foot sup.	0	8½
26-oz. Do.	„ „	1	0
Obscured sheet	„ „	1	1
¼-in. rolled plate	„ „	0	9
¼ in. rough rolled or cast plate	„ „	0	10½
¼-in. wired cast plate	„ „	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	„ „	0	7
Plain painting, 1 coat	„ „	0	9
Do. 2 coats	„ „	1	2
Do. 3 coats	„ „	1	9
Do. 4 coats	„ „	2	4
Graining	„ „	2	3
Varnishing twice	„ „	1	9
Sizing	„ „	0	3
Flatting	„ „	0	7
Enamel	„ „	1	1
Wax polishing	per foot sup.	0	6
French polishing	„ „	1	2
Preparing for and hanging paper	per piece, 2/- to 4/-		

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

PATENTS

APPLICATIONS PUBLISHED.*

299,952.—C. Kirkby & Sons, Ltd., and H. W. Kirkby: Dinner-wagons and dumb-waiters.

299,958.—H. Elliott: Locking fittings for windows, doors, and fanlights.

299,991.—W. M. Bailey: Apparatus for heating and circulating air.

299,997.—W. Greig, Junr., and J. D. Frier: Shop windows.

300,010.—I. J. O'Hea: Poultry-houses.

283,487.—Inventia Patent-Verwertungs-Ges.: Floor-treating machines.

300,056.—K. Nocker: Floors and walls.

300,075.—L. D. Oliver: Brickmaking machine.

300,085.—Chubb & Son's Lock and Safe Co., Ltd., F. J. Butter and H. S. Ball: Reinforcement of concrete structures.

292,468.—Dr. J. Meyer and E. Asmus: Process of manufacturing porous masses from mineral substances capable of setting.

294,103.—J. Severin: Method of manufacturing seamless pipes.

298,618.—P. Van Wienen: Excavating devices.

300,292.—E. G. Enticknap: Machines for the manufacture of concrete blocks.

275,977.—E. Gendrot: Top for chimneys or ventilating-shafts.

300,319.—Hazel Grove Rubber Co., Ltd., and T. Gare: Wearing-surfaces of pavements, roads and treads.

291,415.—A. W. Malone: Metal poles.

300,351.—W. H. Coulter and J. B. Coulter: Stone-dressing machines.

300,384.—E. Fraenkel: Construction of walls of iron framework with panels.

300,393.—D. L. H. Williams: Method of bracing a framed structure, such as a cantilever beam, against torsional deflection.

300,395.—Scottish Central Iron Co., Ltd., and W. Harrison: Combination back-to-back grates.

300,424.—I. E Barr: Hollow building block wall construction.

300,464.—L. Mellersh-Jackson: Curing cementing-materials.

300,467.—Soc. Anon des Ateliers Heuze, Malevez, et Simon Reunis and A. Simon: Apparatus for sawing marble and stone.

300,471.—D. Colville & Sons, Ltd., and R. W. MacBride: Fish-plate joints for girders and beams.

300,486.—L. Mellersh-Jackson: Casting of pipes and other hollow-metal bodies by the centrifugal casting process.

300,491.—Babcock & Wilcox, Ltd., and H. Gill: Open-stair treads.

300,670.—H. Kellett: Composite buildings and structures for town planning.

300,531.—R. Shaw and Wailes Dove Bitumastic, Ltd.: Structural roofing.

300,524.—J. H. Southern and G. D. Cochrane: Hollow floors.

300,674.—S. J. Stiennon: Pipe joints or couplings.

300,675.—W. W. Brown and G. P. Whitney: Means for holding posts.

300,684.—E. J. Frewen: Wallage and similar structures.

300,709.—W. B. Makins and Brown & Makins, Ltd.: Apparatus for cleaning surfaces, such as ceiling and walls.

300,747.—R. Stephenson: Retaining walls and groynes, for use in the vicinity of rivers or tidal waters.

300,757.—Watts Patents Co., Ltd., N. Bloomfield and J. H. Mooney: Machine for reproducing hand dove-tailing.

300,783.—J. Major and S. S. Rogers: Kerb overflows for street gullies.

300,828.—J. Capmany: Protected concrete paving.

295,001.—Maschinenfabrik Augsburgnürnberg Akt.-Ges.: Weirs.

* All these applications are now in the stage in which opposition to the grant of Patents upon them may be made.

TENDERS

* Denotes *accepted.*

† Denotes *provisionally accepted.*

‡ Denotes *recommended for acceptance.*

§ Denotes *accepted subject to modifications.*

¶ Denotes *accepted by H.M. Office of Works, and H.M. War Office.*

Aylsham.—12 cottages, for the R.D.C. Mr. E. Larner, Building Surveyor, 24, King's-road, East Dereham:—

Collison Bros., Reepham	£5,000
H. J. Humphrey, Norwich	4,890
G. W. Pegg, Aylsham	4,860
A. G. Hackwood, Aylsham	4,797
Vincent & Son, Bergh-Apton	4,530
Heinger & Son, Wroxham	4,320
Taylor & Son, Dereham	4,295
†J. W. Palmer, Aylsham	4,180

Biggleswade.—Additions and repairs to "Holmesid," Boys' Home, for the B.G. Mr. Thomas Cockrill, architect, 7, St. Paul's-square, Bedford:—

T. M. Simons & Son, Shefford, Beds.	£439 10
†G. Stiles & Son, Biggleswade, Beds.	434 0

Bingley.—For (*a*) gas holder, and (*b*) condenser, for the U.D.C. Mr. J. B. Balmforth, Engineer and Manager, Gas Works:—

(*a*) *Drakes, Ltd., Halifax.
(*b*) *Claplin Bros., Keighley.

Brookwood.—For (1) New reception hospital; (2) erection of 6 pairs of cottages; (3) extension of nurses' home; (4) roads, fencing, sewers, etc., at the Brookwood Mental Asylum, for the Surrey C.C. Mr. F. J. Hodgson, architect, 201, High-street, Guildford. Mr. E. Lancaster Burne, consulting engineer, 28, Victoria-street, S.W.1:—

(1)—
†Wm. Townson & Son, Ltd., Bolton £30,546

(2, 3, 4).—
†Building & Public Works Co., Ltd., Swindon 17,146

Heating and hot water—
Fretwell Heating Co., London 2,792

Lighting—
V. G. Middleton & Co., Ltd., London 1,225

Darlington.—Second contract for the new central premises in Priestgate, for the Co-operative and Industrial Society, Darlington. Messrs. F. Clark & Son, F. & A.R.I.B.A., architects, Darlington:—

R. Blackett & Son, Darlington	£15,820 0
Geo. Dougill & Sons, Darlington	15,549 14
Co-op. Soc. Building Department, Darlington	14,370 0
*Co-op. Wholesale Soc. Building Department, Newcastle-on-Tyne	13,863 0

Dungannon.—P.E. school at Killyman, near Dungannon, County Tyrone, for the Regional E.C Mr. J. Beatty, Secretary, Education Office:—

Thomas McKeown & Co., Cookstown, Tyrone	£4,390
William Callaghan, Newry	4,200
W. J. & C. Law, Lisburn	4,197
Samuel Leonard, Dungannon	3,950
*Patrick Martin & Co., Dungannon	3,475

Ealing.—37 flats in Hangar-lane, for the Ardsley Estates, Ltd. Messrs. T. P. Bennett & Son, FF.R.I.B.A., architects, 41, Bedford-row, W.C.1:—

Building work—
*Fretho, Ltd.
Steelwork—
*H. Young & Co., Ltd.
Floors—
*Caxton Floors, Ltd
(All of London.)

Eastbourne.—Erection of new wing to the Boys' Grammar School, comprising chemistry and physics laboratories, assembly hall and new entrance from Mill Gap-road, for the E.C. Mr. L. Roseveare, Borough Engineer:—

Gilbert Bros., Broadstairs	£9,300 9 7
J. B. Edwards & Co., Whyteleafe	8,914 0 0
Miller & Selmes, Eastbourne	8,570 0 0
J. Bodle, Ltd., Eastbourne	8,438 0 0
C. Mayo, Eastbourne	8,407 8 0
Peerless, Dennis & Co., Eastbourne	8,318 0 0
*Simms, Son & Cook, Nottingham	8,235 0 0

Edinburgh.—Widening the Great Junction-street bridge, Great Junction-street, Leith, for the T.C. Mr. W. A. Macartney, Burgh Engineer. Quantities by Burgh Engineer's Dept. and Messrs. F. A. Macdonald & Partners, 135, Wellington-street, Glasgow, C.2:—

*Gray Ferro Concrete Co., Ltd., Glasgow £7,675 18 1

Elham.—Additions to the nurses' home at the Institution, near Lyminge, for the B.G. Mr. A. Robert Bowles, L.R.I.B.A., architect, 149a, Sandgate-road, Folkestone:—

T. Vezey & Son, Ashford	£1,920 0
B. Sawyer, Lyminge	1,854 17
R. Webster, Folkestone	1,710 0
S. Vant & Son, Folkestone	1,697 0
O. Marx, Folkestone	1,649 0
Hayward & Paramor, Folkestone	1,617 0
W. J. Harley, Ashford	1,580 0
N. O. Baker, Sandgate	1,580 0
S. H. Page & Son, Cheriton	1,500 0
Folkestone & District Building Co., Cheriton	1,495 10
Jenner & Son, Folkestone	1,482 0
*J. J. Clayson, Lyminge	1,292 10

Elham.—Installation of the central heating and domestic hot water system to the new addition to the nurses' home at the Guardians' Institution, near Lyminge, for the B.G. Mr. A. Robert Bowles, L.R.I.B.A., architect, 149a, Sandgate-road, Folkestone:—

R. Webster, Folkestone	£235 0 0
O. Marx, Folkestone	209 0 0
Hayward & Paramor, Folkestone	198 10 0
W. G. Cannon, Ltd., London	198 0 0
W. Allsworth, Folkestone	197 10 0
Mann Bros., Dartford	189 12 0
National Heating Co., London	188 0 0
Fretwell Heating Co., London	182 4 0
H. Tattersall, Ltd., Rochdale	182 0 0
A. & E. V. Dicker, New Malden	175 0 0
J. J. Clayson, Lyminge	175 0 0
W. N. Mann & Co., Folkestone	172 15 0
Bugler, Ltd., Ashford	169 17 1
Deane & Real, Ltd., London	169 10 0
W. H. Harley, Ashford	150 0 0
*Heat & Light, Ltd., London	133 0 0

Harrogate.—Additions and alterations to the public library, for the Corporation:—

Mason—
*G. A. Scaife, Harrogate.
Carpenters and Joiners—
*J. Allen & Sons, Harrogate.
Plumbers and Glaziers—
*G. Thompson, Ltd., Harrogate.
Plasterers—
*Fawcett & Hall, Harrogate.
Heating—
*England, Robinson & Co., Harrogate.

High Melton.—Two new homesteads on the Melton Brand Farm, for the West Riding C.C.:—

*H. Westmoreland, Balby £3,202 4 10

Hull.—Additions to the drapery establishment in Prospect-street, for Mr. Frederick Trippett. Messrs. Wheatley & Houldsworth, architects. Quantities by the architects:—

Stamp & Son	£25,250 0 0
Vincent Knowles & Sons, Ltd.	24,000 0 0
A. E. Jones (Hull), Ltd.	23,992 0 0
A. J. Darneley & Sons, Ltd.	23,988 0 0
F. Hall & Sons	23,500 0 0
Hinch Bros., Ltd.	23,200 0 0
Kett'ewell, Son, & Co., Ltd.	23,198 0 0
Quibell & Son, Ltd.	23,100 0 0
W. B. Bayes	23,000 0 0
Markwell Holmes & Hayter, Ltd.	22,870 15 0
Robinson & Sawdon	22,899 11 7
Chapman & Dick, Ltd.	22,724 4 0
Charles Houlton	22,651 0 0
Holliday & Barker	22,602 10 0
R. Finch Sons & Co.	22,524 13 9
John Houlton & Son, Ltd.	22,500 0 0
Robt. Tarran	22,473 10 0
Fenner, Panton & Co., Ltd.	22,391 11 6
Con. Greenwood & Sons, Ltd.	22,326 0 0
*Geo. Houlton & Sons	

(All of Hull.)

Irlam.—Additional storage accommodation at the Margarine Factory, for the Co-operative Wholesale Society, Ltd., 1, Balloon-street, Manchester:—

*Building Dept., C.W.S., Ltd., Strangeways (estimated cost) £50,000

Kilrush.—Repairs to the hospital, for the Clare County Board of Health:—

R. McDonald, Galway	£8,930
T. C. O'Neill, Killishen	8,246
S. Cusack, Kilrush	8,129
*J. Daly, Ennis	7,826

Kirkcaldy.—Block of 2 three-roomed houses at Auchmuir Bridge, Auchtertool, Kinglassie and Thornton, for the Kirkcaldy D.C. Mr. W. Williamson, architect, Kirkcaldy:—

J. Robertson & Son, Dunfermline	£971 13 0
Street & Co., Dunfermline	870 10 6
J. Reid, Crossgates	852 19 6
F. Walker, Kirkcaldy	852 9 10
A. Fraser, Kirkcaldy	809 8 0
Wm. Stewart & Son, Crossgates	802 15 8
Wm. J. Dewar, Burntisland	793 17 0
R. Terras, Jr., East Wemyss	781 6 11
*J. Ramsay, Leslie	770 18 2

Letchworth.—Overbridge over the L. and N.E. Rly., Station-place, for the U.D.C. Mr. Charles J. Brown, engineer, L. & N.E. Rly., King's Cross, N.1:—

Fred Mitchell & Sons, Ltd., Manchester	£10,601 11
H. Arnold & Son, Ltd., Doncaster	10,505 0
A. J. Arnold, Chelmsford	9,201 17
H. Coxhead & Co., Middlesbrough	8,983 4
D. G. Somerville & Co., Ltd., London	8,801 18
John Ray, Letchworth	8,378 6
Logan & Hemingway, Doncaster	7,976 14
John Wilson & Sons, Birmingham	7,671 16
A. Waterman, Leeds	7,646 9
John Willmott & Sons, Hitchin	7,485 12
F. C. Construction Co., Derby	7,453 4
H. Hurst, Letchworth	7,415 2
John Cochrane & Sons, Ltd., London	7,250 15
A. E. Farr, London	7,237 0
John Bills, London	6,681 16
Jackaman & Son, Ltd., Slough	6,643 12
Fletcher & Co., Ltd., Mansfield	6,631 18
W. & C. French, Essex	6,503 10
*Francois Cementation Co., Ltd., Doncaster	6,414 4

Levenshulme.—Branch bank and lock-up shop at Stockport-road and Alexandra-terrace, for the Midland Bank, Ltd. Mr. John Knight, F.R.I.B.A., architect, 5, Cross-street:—
*Jonathan Partington & Co., Ltd., Middleton Junction.

Liverpool.—Cleaning and painting, etc., at St John's Market, for the T.C. Land Steward and Surveyor:—
*T. McHugh, Bootle.

London.—Additional story to the tobacco factory, Corbet-place, Whitechapel, E.1, for Messrs. Godfrey Phillips, Ltd. Mr. W. Gilbee Scott, F.R.I.B.A., architect, 25, Bedford-row, W.C.1:—

John Garrett & Son, Ltd.	£3,426
Griggs & Son	3,377
J. Jarvis & Sons, Ltd.	3,333
L. & W. Whitehead, Ltd.	3,084

London.—Branch premises at Nos. 140-144, Leadenhall-street, E.C.3, for the Midland Bank, Ltd. Messrs. Whinney, Son, & Austen Hall, architects, 8, Old Jewry, E.C.2:—
*Rubery, Owen & Co., Ltd., Darlaston.

London.—Steelwork for the block of offices known as Melbourne House, Melbourne-place, Aldwych, W.C. Messrs. Trehearne & Norman, architects, Windsor House, Kingsway, W.C. Mr. Hugh Watkins, 13, Gray's Inn-square, W.C., quantity surveyor:—
*Lindsay's Paddington Iron Works, London.

London.—New premises at the corner of New Oxford-street and Tottenham Court-road, London, W.C.1, for Messrs. Montague Burton, Ltd.:—

Franklin & Co., Erith	£70,624 0 0
Humphreys, Ltd., London	67,379 11 10
Trollope & Colls, Ltd., London	66,200 0 0
Holloway & Greenwood, Ltd., London	64,611 0 0
Myers, Limited, London	63,994 12 0
John Greenwood, Ltd., London	63,992 0 0
W. O. Everitts, Ltd., Croydon	63,756 0 0
A. & F. J. Leather, Ltd., London	63,305 0 0
Bovis (1928), Ltd., London	62,767 0 0
Sir Lindsay Parkinson & Co., Ltd., London	61,990 17 1
Rice & Sons, Ltd., London	61,899 0 0
W. H. Gaze & Sons, Ltd., Kingston-on-Thames	60,383 0 0
Thomas & Edge, London	60,381 0 0
G. E. Wallis & Sons, Ltd., London	60,109 0 0
Burnand & Pickett, Ltd., Wallington	59,962 13 1
The Edwards Construction Co., Ltd., London	59,923 0 0
Wm. Moss & Sons, Ltd., London	59,732 4 10
F. J. Moreton & Son, London	58,600 0 0
The Lansdowne Building Co., London	57,472 0 0

London.—Redecoration of the interior of the old portion of the Central Library, for the Lewisham B.C.:—

Burke, Collins & Co., Ltd.	£316 0
R. Cabell	235 0
E. C. Christmas	220 0
Cole, Loasby & Co., Ltd.	206 0
A. T. Peyton	199 10
Walker, Clinging & Co.	196 12
Black & Son	181 0
*J. Elliman & Son, Ltd.	175 0

London.—Improvements to 184 single-flue stacks and 18 double-flue stacks on the Grove Park estate, for the Lewisham B.C.:—

	Per single-flue stack.	Per double-flue stack.
Cole, Loasby & Co., Ltd.	£3 10 0	£5 5 0
Cutler & Sons	2 19 0	4 5 8
G. Aspden	2 15 6	3 16 6
Burke, Collins & Co., Ltd.	2 8 0	4 0 0
*A. T. Peyton	2 5 6	4 7 6

London.—Motor repair shop and garage in Knott-street depot, for the Deptford B.C.:—
*T. D. Leng, Deptford £797

Lymm (Cheshire).—Alterations to the "Spread-eagle" Hotel, for Messrs. Groves & Whitnalls, Ltd., Regent-road, Salford. Messrs. Charles Clegg & Son, architects, 30, Brown-street, Manchester:—
*Peace & Norquoy, Ltd., Manchester.

Manchester.—Improvements to the "Stag Inn" at Hodge-lane, Pendleton, for Messrs. Groves & Whitnalls, Ltd. Messrs. Charles Clegg & Sons, architects, 30, Brown-street:—
*Hollingworth & Sons, Manchester.

Manchester.—Gentlemen's dressing-room and shelter for tennis players in Crowcroft-park, for the Parks Committee:—
*J. H. Billings & Co., Manchester.
Masons—
*Radcliffe & Sons, Longsight.
Slaters—
*E. Turner & Sons, Newton Heath.
Carpenters and Joiners—
*J. T. Long & Sons, Newton Heath.
Plumbers—
*Ashcroft & Sons, Manchester.
Plasterers and Painters—
*J. Gibbons & Son, Cheetham.

Manchester.—New church and additions to the Sunday school in Wheler-street, Openshaw, for the trustees of the Moravian Church. Messrs. Taylor & Simister, L. & A.R.I.B.A., architects, 29, Queen-street, Oldham:—
*E. Marshall & Sons, Ltd., Ashton-under-Lyne.

Manchester.—Two shelters in Fog Lane-park, for the Parks Committee:—
*J. H. Billings & Co., Manchester.
Carpenters and Joiners—
*J. T. Long & Sons, Newton Heath.
Slaters—
*Valentine & Sons, Eccles.
Plumbers-Glaziers—
*T. Lightfoot & Co., Manchester
Painter—
*F. Pilling, Manchester.

New Byth (Aberdeen).—House at Byth House, New Byth. Mr. G. Watt, architect, 214, Union-street, Aberdeen:—
Builder—
*John Shewan, Pitsligo.
Carpenter—
*George Leslie, New Byth.
Slater—
*W. J. C. Eddie, Fyvie.
Plasterers—
*A. Wiseman & Son, Fraserburgh.
Plumber—
*W. Crichton, Auchreddie.
Painters—
*John Whyte & Co., Aberdeen.

Northwich.—14 cottages on two sites in Little Budworth, for the R.D.C.:—
*W. E. Noden, Winsford, Ches. (10).
*Wright Bros., Huxley (4).

Nottingham.—Extension to the kitchen in the tubercular ward at Bagthorpe Infirmary, Hucknall-road, for the T.C. Messrs. W. B. Starr & Hall, architects, 12, Victoria-street:—
†Thos. Long & Son, Nottingham.

Plymouth.—Builders' jobbing work, for the C.B.:—
*Pearn Bros., Ltd.

Plymouth.—Dental clinic at 30, High-street, for the C.B. City Architect:—
*C. Lobb £202

Plymouth.—2 shops and 2 houses on Higher Mount Gold, for the C.B.:—
*C. Steer £2,373

Portadown.—18,000 lineal yards of 6-in., 9-in., 12-in., 15-in., 18-in., 21-in., 24-in., and 27-in. pipe sewers, with the necessary manholes, flushing chambers and storm overflows; taking up and relaying certain existing sewers, sewer crossings under railways; and also construction of bacterial sewage purification works and levelling and laying-out of land at outfall at Seagoe, for the U.D.C. Messrs. Taylor & Wallin, engineers, 1, Saville-place, Newcastle-on-Tyne:—

John Laing & Son, Carlisle	£97,306
D. Thomson & Son, Carlisle	93,941
W. J. Campbell & Son, Belfast	71,443
K. & J. Martin, Belfast	72,709
J. P. Graham, Dromore	66,981
J. Leslie & Sons, Whitehaven	66,468
Hussey, Egan & Pickmere, Birmingham	65,357
T. B. McKee & Co., Belfast	64,947
Grainger Bros., Holywood	63,638
Buchan & Co., Ltd., Brighton	62,003
G. E. Simpson & Co., Newcastle-upon-Tyne	59,908
R. D. Pollock, Bangor	59,383
Alston Limestone Co.	59,383
R. R. Faris, Armagh	59,208
P. Henry, Stockport	57,973
*Collen Bros., Ltd., Portadown	56,960

Portsmouth.—Alterations at "Highland House" P.H., for Messrs. Mew Langton & Co., Ltd. Messrs. A. E. Cogswell & Sons, chartered architects and surveyors, Portsmouth:—

Saml. Salter, Southsea	£379 0
Howe & Bishop, Southsea	311 0
T. L. Norman & Sons, Southsea	300 0
John Lay & Co., Portsmouth	284 0
A. E. Porter & Son, Portsmouth	244 10

Pwllheli.—Repairs for (*a*) structural alterations; (*b*) electrical illumination; (*c*) painting and decorating; and (*d*) gas heating, at the Wesleyan Chapel, Pwllheli, for the Building Committee. Mr. R. D. Jones, A.R.I.B.A., architect, 36, High-street, Pwllheli:—
(*a*)—

Jones & Evans, Pwllheli	£385 0
W. R. Williams, Pwllheli	371 10
*Daniel Owen, Dinas, Pwllheli	370 0

(*b*)—

National Electric Construction Co., Ltd., Carnarvon	£35 0
*Electrical Contracting Co., Pwllheli	30 0
West Wales Electric, Ltd., Criccieth	29 0
B. W. Sprowell & Co., Pwllheli	25 10

(*c*)—

W. T. Jones, Pwllheli	274 0
*I. Ravenhill & Son, Pwllheli	165 0

(*d*)—

*The Holyhead and North Wales Gas and Water Corporation, Ltd., Holyhead	111 15

Reading.—Dressing rooms and lavatory accommodation in Palmer Park, for the C.B. Mr. A. S. Parsons, Borough Engineer and Surveyor:—
*Canning & Sargeant, Wokingham.

Rochdale.—Gentlemen's conveniences in Queen-street, for the C.B. Mr. S. H. Morgan, Borough Surveyor:—
*R. Blincoe, Rochdale.

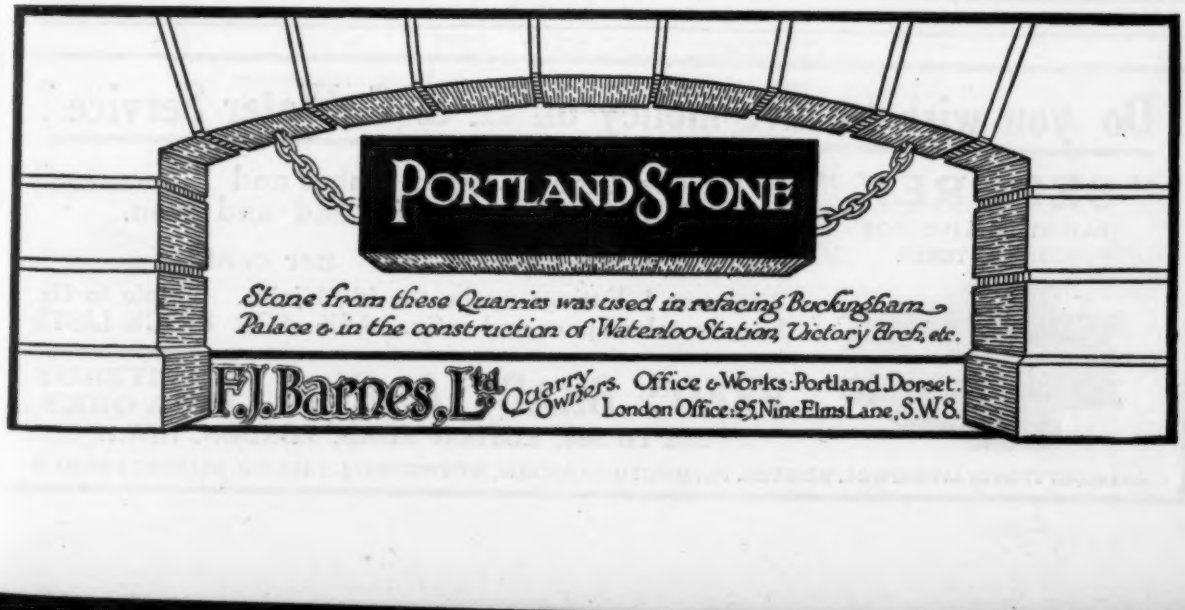
Scarborough.—Reconstruction of premises in Westborough, for Messrs. Freeman, Hardy & Willis, Ltd.:—
*Jaram & Son, Scarborough.

South Shields.—Garage and offices for the Northern General Transport Co., Ltd., of Chester-le-street:—
W. Hall, Ltd., Gateshead ... approx. £10,000

Stockton.—Erection of Frederick Natrass schoo's, at Norton, for the T.C.:—
*H. M. Nowell, Ltd., Stockton £21,159

Stockton.—Erection of motor omnibus garage at Bridge-road, for the T.C.:—
*P. Duffy, Norton £5,810 3 6

Stowmarket.—Two classrooms and headmaster's room, and alterations to science laboratory, at the Secondary School, for the East Suffolk E.C. Mr. C. G. Stillman, F.R.I.B.A., Architect, County Hall, Ipswich:—
*A. J. Gibbons, Crowfield, Ipswich ... £1,640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Stretford.—Interior decorations to houses on the Seymour-grove site, for the U.D.C.:—

36 non-parlour type—
*J. Collinge & Son, ... per house £9 0

34 parlour type—
*T. W. Bagley ..... per house 11 2

36 parlour type—
*H. Storer ..... per house 12 10

30 houses, elsewhere—
J. Hartland ..... for the lot 100 0

Swansea.—Alterations and additions to Walter-road Congregational Church and Sunday School. Messrs. H. C. and O. S. Portsmouth, architects, Llanfair-buildings:—
*D. Jenkins, Ltd., Swansea.

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Thomastown.—Reconstruction of the Courthouse, for the Kilkenny C.C.:—
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Richard B. Nolan, Waterford 2,272
Roche, Morrissey & Kennedy, Clonmel 2,125
*Connolly & Cullen, Kilkenny 1,830

Thorne.—36 houses at Marshland-road:—
*W. Wilkinson.

Treherbert.—Extensions to Fernhill Workmen's Hall and Institute. Mr. W. D. Morgan, L.R.I.B.A., architect, 199, Ystrad-road, Pentre, Rhondda:—
*Vickery Bros., Barry £2,325 11 4

Wakefield.—School for 180 children, for the West Riding E.C. Mr. H. Wormald, A.R.I.B.A., County Architect, Wakefield:—
Masons—
*T. Hollingworth & Sons, Cumberworth.
Joiner—
*F. Waite, Calder Grove.
Slater—
*J. Hargrave, York.
Plumbers—
*Atkinson & Smith, Bradford.
Plasterer—
*H. Wilson, Monk Bretton.
Painter—
*L. Smith, West Melton.
Whitesmith—
*W. Gratrix & Sons, Walkden.
Asphalter—
*M. G. Spencer, Silsden.

Wallasey.—Mortuary in Rake-lane cemetery, for the C.B. Mr. L. St. G. Wilkinson, Borough Engineer, Wallasey:—
*Evans & Williams, Liverpool £848
(Subject to sanction of M.H.)

Whickham.—New Miners' Welfare Hall and Institute for the Miners' Welfare Committee. Messrs. Watson & Scott, architects, 16, Pilgrim-street, Newcastle-on-Tyne:—
*Shield Bros., Swalwell.

Whitby. — Alterations and additions to the electricity showrooms in Flower-gate, for the U.D.C. Mr. J. R. Seward, engineer and surveyor. Quantities by the engineer:—
A. Palframan & Son £1,506 0
J. Braim & Sons 1,480 0
*J. Kidd & Sons 1,468 9
(All of Whitby.)

Wolverhampton.—New licensed premises in Victoria-street, for Messrs. W. Butler & Co., Ltd., Springfield Brewery. Mr. James A. Swan, F.R.I.B.A., architect, Daimler House, Birmingham:—
*Hen. Gough & Son, Wolverhampton.

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